

The GEOGRAPHICAL

Magazine



CANADA



AUSTRALIA



INDIA



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ZEALAND



CEYLON



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COMMONWEALTH

NUMBER 2/6



The coloured gaiety of an Edwardian evening preserved within the greyer world of today... The interval's little valley of relaxed small-talk between the towering peaks of music and emotion... The crispness of a white tie seen against a fat background, all crimson and gold... And for perfection one thing more—

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Pakistan's Economic Prospects

by IAN STEPHENS

Out of twenty-one years in India, Mr Stephens served for two-thirds on the staff of The Statesman, a newspaper published in Calcutta and Delhi. He was its Editor from 1943 to 1951. While Editor—and again last year—he several times visited Pakistan, a land “rich in new enthusiasms”

PAKISTAN might be claimed as the most interesting, or at any rate the most curious member of the Commonwealth. She is full of paradoxes—besides being a very delightful country to travel in.

Professedly Islamic, founded upon religion—and some reckon religion old-fashioned as the basis for a state—she is nevertheless held together by the most modern mechanical techniques. Without aircraft and wireless, for instance, she could scarcely exist. You need not make the big journey between her Western and Eastern sectors to realize this. You have only to visit such a place as Gilgit—admittedly still disputed territory, but in practice administered by Pakistan since 1947.

Established, furthermore, upon an ancient civilization, upon a soil cultivated almost changelessly for millennia by an Oriental peasantry, upon soil, too, where a characteristic Western Imperialism had for long rather rigidly maintained itself, she is nevertheless a new country, almost in the sense that America or Australia are new, rich not only in new ideas and enthusiasms, but in natural resources still waiting exploitation. One of the easily arrangeable excursions with her administrators and technicians to an area now under large-scale development will demonstrate this. These men are mostly young, for promotion came quickly on the withdrawal of the British and (besides being very good company) they possess all youth's creative zest.

Physically, Pakistan's paradoxical quality is outstanding. Her enemies might call her a freak, a monstrosity. No other state of quite such odd construction exists. For she consists of two slabs of territory, her Western and Eastern sectors, which differ in climate, in agriculture, in language and even in race, in almost everything that usually makes for unity, and which are separated by about 1000 miles of foreign soil. Many people, scrutinizing the map before she came into being in 1947, understandably doubted whether so peculiar-looking a country could cohere. I certainly remember doing so myself, as I sat in my editorial chair at Delhi during the dramatic summer of that year, peering out over the changing political scene.

Nor were the doubts based only on physical considerations. Serious economic ones were adduced. The old British Raj in India, then about to die, had been an integrated trading entity. How, critics asked, when this was artificially split, could the smaller of the two successor-states, consisting moreover of these two awkwardly detached pieces, achieve real financial or commercial independence? One of the ablest of the new India's industrialists, during the weeks before the old India was partitioned, published a memorandum proving to his satisfaction and that of many others that Pakistan was not economically viable. But such writings began to read strangely not long afterwards. When in September 1949 the devaluation crisis swept the globe, Pakistan alone among the countries of the sterling area found herself strong enough to uphold her currency.

Progress, however, has been far from smooth. Her economy has moved through three distinct phases, during each of which I was lucky enough to manage some Pakistani travels. First, in 1947–8, there was the chaotic initial phase, when she was struggling to establish herself amidst unprecedented massacre and commotion. Millions of uprooted people were wandering about, many of them destitute; her Central Government lacked even such material necessities as office buildings, telephones or stationery; her banks and mercantile firms lay half paralysed, emptied of their trained Hindu and Sikh personnel.

When these difficulties had, as it seemed, been almost miraculously overcome, about the middle of 1948, there followed a phase of prosperity and expansion, intensified in 1950 by the fortuitous filip which the war in Korea gave to primary-producing countries. Excusably enough, after the previous dire adversity, this bred some over-confidence.

With the beginning of 1952 ensued a phase of serious recession. The war-inflated prices of Pakistan's exports, of which the most lucrative are jute and cotton, fell heavily, and this, in conjunction with misfortunes not of economic origin, caused grave internal stresses, which culminated in the Cabinet crisis of April, 1953. The country has since scarcely

had time to readjust itself; but if the administrative improvements hoped for are achieved, the shake-out from the boom of 1950-51 may eventually prove healthy.

It so happened that the two areas of the old India which became Pakistan had both—compared with the rest—been economically somewhat neglected by the British. East Pakistan they usually regarded as a sort of backyard or kitchen-garden for the great industrial centre and seaport of Calcutta, the most populous city of the Raj, and for many decades its capital. And West Pakistan—with which this article mainly deals—was viewed, whether from Calcutta or Delhi, primarily with a strategic eye, as a defence-zone bolstering the Raj against onslaught down the historic invasion routes from what is now Russian Central Asia.

As a result, when Pakistan was about to be born, her future leaders were faced with the prospect of grave industrial weakness. The new state's resources appeared almost entirely

agricultural. The factories of the subcontinent would nearly all fall within the frontiers of the new India. Further, Pakistan would have almost no good coal, her total output being only about 500,000 tons annually, of inferior sulphurous quality.

Her creators however—Mr Jinnah, Mr Liaquat Ali Khan and others of the Muslim League—were determined that she should be in the fullest sense independent. A programme of industrialization was therefore imperative. As she would lack good coal, and probably be deficient also in oil, they cast about for some alternative and at once saw that in water-power lay the answer. In this her potential was almost limitless. It would involve no transport from abroad, no lavish outlay in foreign exchange. It needed little more than imagination and hard work.

Electricity projects are therefore the backbone of Pakistan's planned economy. In 1947 she possessed only a single hydro-electric generating station: at Jabban below Malakand on the North-West Frontier, picturesquely situated near the famous fort, scene of important affrays and expeditions during the expansionist period of the British Raj. Here, where the Swat river, coursing from the north, bends westwards on striking against hills, water is drawn off by a canal which tunnels through them almost under the fort, to find a good electrical 'fall' of about 250 feet into the Dargai valley on the south side.

Malakand had an installed capacity of under 10,000 kilowatts. By 1951, with fresh installations, Pakistan had doubled this. And four miles downstream, at Dargai itself, she undertook a companion-project to generate a further 12,000 kilowatts. Much of the excavation at Dargai has been done by Mahsud tribesmen—by repute the fiercest sort of Pathan—who, when I called on them in 1951 and '52, presented a romantic spectacle, wielding pneumatic drills in expert style on the rocky hillside, begoggled or with their handsome black bobbed locks blowing in the breeze.

These hard-headed people, traditionally marauders and participants in feud-warfare, have in recent years been quick to see what modern technology may mean in terms of acquiring material power. They are now enthusiasts for the establishment of more schools in tribal territory—provided that the education has practical bias. Many of their young men, during World War II, showed remarkable aptitude for work with motor transport units, not merely as drivers but as mechanics.

From these two stations, Malakand and Dargai, electricity will cover the North-West



A. J. Thornton

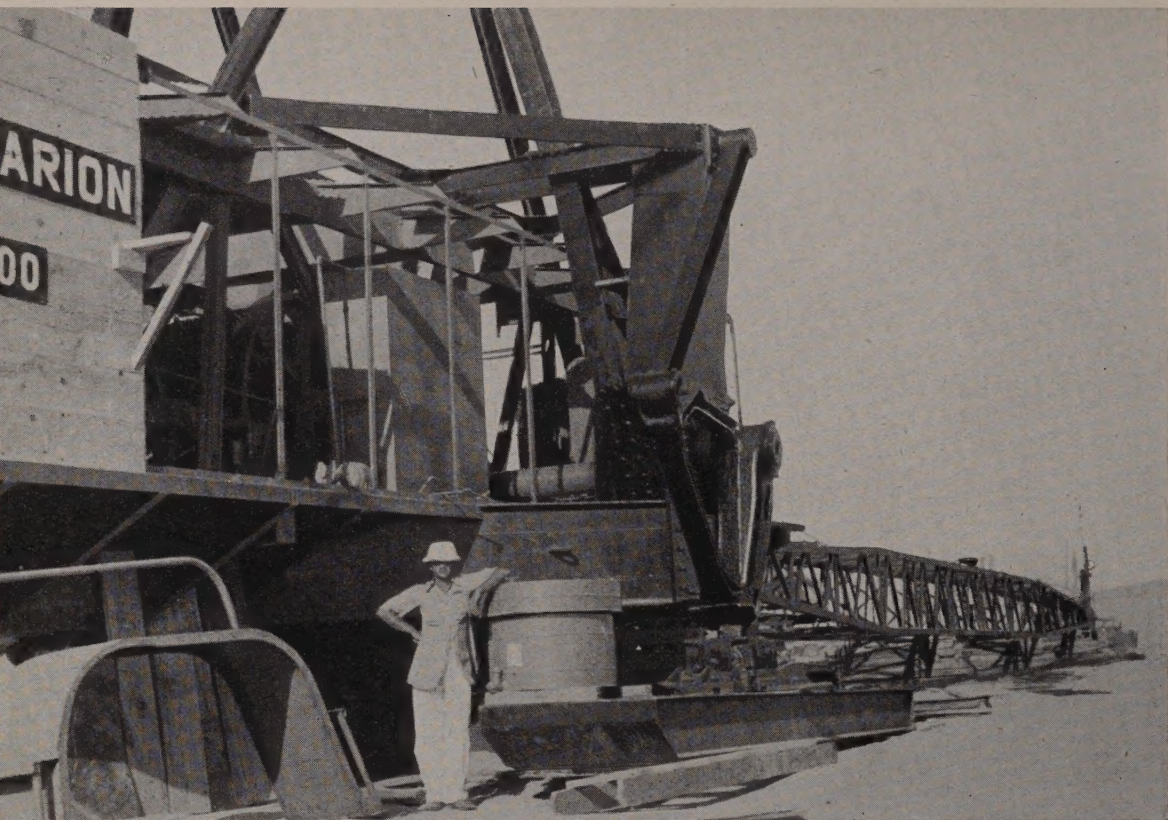


By courtesy of the Pakistan Information D

(Above) A general view of the Jabban hydro-electric project, below the Malakand Pass on the North-West Frontier, showing pipelines descending the hill. The water comes by tunnel under the Pass from the River Swat. (Right) Mahsud tribesmen, recruited to a labour battalion, at work on the new Dargai project, in the same valley four miles below Jabban. These reputedly fierce Pathans prove skilful and energetic workers



Ian Stephens



John Seymour

'Walking draglines' are helping to build the Kotri Barrage. (Above) A view of one of these from cab to grounded jib gives some idea of their vast size. (Below) The site of the dam seen from the top of a jib. The Kotri Barrage, when finished, will fertilize the desert country from the city of—



John Seymour



Unesco

—Hyderabad on the Indus to the sea; it will support the new rural population in this area; will enable a new model town for 100,000 people to be built; and will improve Karachi's water-supply. (Above) An artisan, aided by a woman labourer, at work on the gigantic ramparts of the barrage

Frontier and part of Pakistani Punjab. The rest of Pakistani Punjab—hitherto rather humiliatingly dependent on Jogendranagar in Indian Punjab—will be served by the new 22,000-kilowatt hydro-electric project at Rasul on the Jhelum.

These, however, are single-purpose projects, as are the diesel or steam-power electric generating stations at Karachi, Hyderabad, Lyallpur, Khulna, Narayanganj and Chittagong, whose aggregate capacity is 125,000 kilowatts. Much more impressive will be the multi-purpose hydro-electric projects at War-

sak on the North-West Frontier, where the Kabul river breaks forth from Afghanistan through a narrow gorge; on the Karnafuli in East Pakistan; and at Mianwali in Pakistani Punjab, where the Indus debouches from the Salt Range. (Mianwali is mentioned last, because of doubts lately expressed about certain of its technical aspects.) These three undertakings will range in capacity from 30,000 to 150,000 kilowatts. Their object is not merely to produce electricity lavishly but, as in the Tennessee Valley of the U.S.A., to control floods, drain water-logged areas, con-



A.P.I.A.

(Above) The mighty Jinnah Barrage, key to the Thal land-reclamation project, here spans the River Indus, in Upper Punjab. The picturesque little town of Kalabagh lies at the far end, beneath the jumbled hills. A scale-model of the Thal area, for visitors to consult, can be seen in the left foreground. (Below) Pakistani-operated bulldozers preparing a tract of desert for cultivation

A.P.I.A.





A.P.I.A

(Above) The water from the Indus, conveyed down distributary channels, has arrived, and gardeners on their haunches are planting baby trees. Some millions have already been put in: fruit-trees, trees for timber and fuel, trees which will serve as windbreaks, shade-makers and moisture-creators.

(Below) An early morning outdoor class of settlers' children at one of the many newly built schools

A.P.I.A



trive lift-irrigation, develop mines, process agricultural produce and so on.

Associated with the Mianwali project, but as a separate entity, and begun before it, is the Thal land-reclamation scheme—of all Pakistan's undertakings perhaps the one in which she is most entitled to feel pride. Foreign experts comment on it in glowing terms. No ordinary person, travelling through it as I did last year, could fail to be impressed by what had been achieved and is in prospect. It is designed to convert into fertility, by canals drawn from the Indus near Kalabagh, a sterile waste of about 1,500,000 acres, and to support a population of about 270,000.

Another huge project, well advanced, is the Kotri Barrage near Hyderabad. Its primary purpose, like that of the Thal, is to irrigate desert; but it will produce electricity too—and a good water-supply for dusty Karachi. Unfortunately not all the sources of Pakistan's irrigational water are within her control, as has been evident from distressing differences with India this spring about lessened water-flow in some of the big canals fertilizing the wheat- and cotton-growing areas of Pakistani Punjab. These problems, however, do not apply to the major new hydro-electric projects, which are geographically outside their range.

Though Pakistan's meagre resources of coal, located in Punjab and Baluchistan, seem unlikely ever to be of much use, the vast lignite deposits of East Pakistan have lately attracted renewed attention. Perhaps more interesting, however, is oil. The yield from the oilfields in Punjab, notably at Balkesar, is about 15,000,000 gallons annually, but an important new field has lately been found nearby at Chakwal—though there is said to be some asphalt-contamination. A large deposit of natural gas has been discovered. Prospecting for oil continues in East Pakistan.

Minerals other than the fuel-producers are many, though not always accessibly placed. Most of those important as raw materials for industry are known to exist; and in some the country is rich. It is moreover conceivable that revolutionary discoveries have yet to be made. Pakistan, besides having been a somewhat disregarded region by comparison with what in 1947 became the new India, also suffered from the neglect of scientific exploration for which the British Raj must be held accountable. The Geological Survey of India, never big enough though ably manned, suffered crippling retrenchment in 1931—at a time when a gigantic extension of mineralogical enquiry was being undertaken by the

Soviet Governments in Asiatic Russia.

Industrialization in Pakistan will be backed by good communications, for which the Raj deserves credit. Fine railways and roads were built in West Pakistan, partly for strategic reasons. The railway route mileage there is about 5350; it has the widest broad-gauge track in the world, 6 ft 6 ins. In swampy East Pakistan railways and roads are naturally less good; the shortcoming is to some extent offset by river steamers—for the visitor, a charming means of restful, picturesque travel. Even so, there are nearly 1700 route miles of railway. Locomotives, because of Pakistan's deficiencies in coal, are being converted to diesel-traction. Owing to her peculiar geography her air-services are well developed; and her aircrews, military and civilian, are of fine quality, as I can testify, having flown much with them. Karachi ranks among the ten great airports of the world. It is also a major seaport and in process of being much enlarged.

Most important in Pakistani eyes among the country's new-built factories are the jute mills and cotton-textile mills. These were planned to make Pakistan fully independent of India's great industrial centres for the processing of her two most lucrative cash-crops. Other industrial undertakings have been sprouting up in great variety: cement factories, woollen mills, factories making leather-goods, tobacco, carpets, pottery, glass, dyestuffs, power-alcohol and so forth. At Mardan in the North-West Frontier Province is said to be the biggest sugar mill in Asia.

But behind all this busy industrial development the real Pakistan, the country that her visitors love, remains essentially rural, a country of farming and grazing, of a handsome friendly peasantry, and of villages producing delightful handicrafts. Over three-quarters of her 76,000,000 inhabitants remain dependent upon the land for their livelihood, and owing to the diversity of her climates and soils, the range of agricultural production is wide: jute and cotton, wheat and rice, sugar and tobacco, maize, gram, the pulses, every imaginable sort of fruit, meat and dairy-produce, fish. Great scope exists for improving their yields by modernizing methods of cultivation; and improvement should spread as the peasants become more familiar with the skills deriving from industrial techniques. This interaction between industry and agriculture should augur well for Pakistan's economic future, and for her ability to sustain a rapidly increasing population.

The Australian North-West

by LORD RENNELL



The St George Range. Such rough hills are frequently the only boundaries between the stations of the North-West. To the south-east the pastoral country runs out into the Dead Heart of Australia

Lord Rennell undertook a flying tour of the North-West last year. He was especially interested in the delivery of beef slaughtered inland on stations and transported to the seaboard by air. Mr Duncan Beaton of Noonkanbah sheep station took the colour-photographs accompanying his article

THE "Kimberleys" in northern Western Australia only two generations ago were to the people of Perth and the settled country from Geraldton to Albany what the fabulous "West" was in the United States of America before the trans-continental railways were built. While the central and southern parts of Western Australia along the broad coastal strip are by no means what we would call closely settled even today, in the last quarter of last century there were already restless pioneers who were turning their thoughts and their steps to the great cattle country of the North-West where unallotted ranges with a regular rainfall and a good climate seemed to call for development. From the 1880s onwards for twenty years Crown pastoral leases over tracks of 1,000,000 acres and more at a time were granted to those who were willing to carve themselves homes and ranches, or "stations" as they are called in Australia, out

of the savanna and park bush country. While most of these succeeded and survive to this day, the development of the country by roads and railways hung, and still hangs, fire. The vast expenditure of money involved in further development never seemed to justify the investment: there were always better opportunities and quicker returns nearer the centres of closer settlement, and in the gold mines and all the services which these attracted. Yet the pioneers were right in their vision. The North-West is still the greatest potential source of meat for the world today.

The main reason why progress was halted for the best part of seventy years was the world price of meat, and especially of beef, in the first three decades of this century. The competition of Argentine chilled beef and the growth of the canning industry in the Americas, especially when the U.S.A. was still a net exporter of animal food products, made

it difficult for Australian beef to compete in European markets at all; it put the remote North-West almost completely out of the running.

But the picture is changing. Lack of roads, railways and adequate harbours has not prevented the aeroplane, the heavy-duty diesel truck and petrol lorry from linking up even these remote and lost homesteads with the outside world. The air freighter has already provided the answer, if still on a small experimental basis of which the drought year 1952 has proved the value, to the problem of economic delivery of beef to the seaboard. It was to see the locus of this experiment and the country in which it was being tried out that in February 1952 I did a tour from Perth to the North-West in a chartered Anson aircraft which I finally left at Adelaide after flying down through the centre of Australia via Daly Waters, Tennant Creek and Alice Springs.

It was, of course, as everyone pointed out, quite the wrong time of year to do such a trip.

It would be very hot. The weather would be most uncertain because the rains would have begun. The creeks and rivers would be in flood and impassable by cars which inevitably would get bogged down in the bush roads. The cattle would be in the worst condition of the year before they made good on the pasture which followed the 'wet' (season). The interior abattoir and chilling plant at Glenroy in the middle of the Kimberleys would be closed down as the killing season did not start till May. Finally, the landing strips would be quite unreliable as they were nearly all dirt runways. I retorted that the best time to look at a farm in England to see what it really was like was in the middle of a very wet and cold winter. So we left Perth in the Anson and had a blandly uneventful trip as far as difficulties and adventures were concerned. It is true that the rains were late so the country was not unduly difficult and we met only a few patches of bad weather. It was certainly hot at times and I did once have to strip and wade two creeks to get to the homestead where we were





Kodachrome

(Above) The great Fitzroy River does not flow all the year, but long deep permanent pools provide water during the dry season, and harbour landlocked sea-fish which sometimes include sharks. Many of the ranges like the Oscars (below) are serious barriers to stock movement, as well as boundaries



Kodachrome



Kodachrome

Station labour in north-western Australia is largely provided by the aborigines, who show great aptitude for this work. (Above) A fencing team: they go out with their women for weeks at a time

lunching because cars couldn't cross the flooded watercourses.

The north-west corner of Australia boasts three usable harbours at Broome, Derby and Wyndham. Broome, once the centre of a profitable pearl and pearl-shell trade, and Wyndham have freezing works where meat can be shipped in ocean-going refrigerated ships, but the Broome plant is small and was originally designed mainly to serve the needs of Allied troops in the area during the war against Japan. There are no hard roads and few made crossings over the several great rivers which drain the North-West. The rainfall at the coast is normally heavy, up to 40 inches, but it is the rain of the southern edge of the South Monsoon belt and only falls between December and March. The rest of the year is dry and healthy. In the central Kimberleys the usual rainfall is 20-25 inches. It peters out to nothing in the south-east where the cattle country runs into the Dead Heart of Australia.

The Kimberleys are a series of broad basins crossed by innumerable creeks discharging during the 'wet' into the Fitzroy, Ord, Margaret and Durack Rivers, which run continuously only during the rains: but they provide innumerable permanent pools, water in the sandy beds and a generally accessible

water-table away from the main beds. Between these river systems are great ranges of arid rocky hills rising up to 3000 feet. It is over such stony and inhospitable features that the stock-routes run from the inland stations, following lines of permanent open water-holes winding their way up and down the ranges. They are hard on cattle even after the 'wet'. Hitherto, only five- to six-year-old cattle have proved strong enough to stand up to these rocky, waterless and overgrazed droving roads, sometimes 250 to 350 miles long, from the stations to the coast at Broome or Wyndham. The losses in beasts and in condition of the survivors need no description. Values of 50s. to 100s. a head at the station speak for themselves.

The stations of this vast country are mainly cattle stations. There is one very famous sheep station at Noonkanbah in the Fitzroy Crossing area. Their size is staggering—1,000,000 acres or more. It is difficult to imagine a million acres. My own county, Herefordshire, is only about 500,000 acres: Somersetshire and Lancashire are about 1,000,000 acres each. 1,000,000 acres is a bit over 1500 square miles: an area say of 40 by 40 miles or 160 miles round the boundary, which is usually undelimited on the ground and formed by ranges of hills or watercourses.

Such a station will have one, perhaps two, homesteads inhabited by the family of the owner or his manager, one or two other white men perhaps, and a settlement of aborigines who provide the station labour for mustering, branding, shearing, culling and looking after the horses, which are still the main, and in the 'wet' the only, means of transport. Access to the outside world is by a bush trail during the 'dry' with wagons, cars and trucks which bring in the year's stores and, in the case of sheep stations, remove the wool. The product of the cattle stations goes out on the hoof.

That, at least, was the condition of things until a very few years ago when the radio, the radio telephone (still called the 'pedal set'—but now usually run off a small petrol generator) and the aeroplane brought about almost a revolution in social conditions. To-day, nearly every station has its 'strip', at many of which the weekly or fortnightly 'milk round' station air service calls with mail, stores, spares and passengers inward and outward bound. The radio, apart from entertainment, provides educational facilities and,

of course, news. The 'pedal set' organized under the Flying Doctor Service takes care of urgent messages inwards and outwards, the services of the Flying Doctor himself with, if necessary, a nurse and the ambulance plane, and above all local contact from station to station, local news, weather reports and gossip. With the aeroplane have come, slowly, improvements in the domestic amenities of the stations—refrigerators, generating sets, newspapers and books. The sons, frequently, and the grandsons of the pioneers of the 1880s, though physically still remote, again belong to the civilized world.

These developments produced the seed of a new idea—a new scheme for the development of the North-West. Why not kill on the station and fly out the meat to the seaboard freezer for shipment? It would save the losses on the stock-routes, produce cattle in prime condition for killing and allow younger animals to be killed; all of which would increase the value of the stock at the station and, therefore, the value of the station itself, which in its turn would make capital avail-

Lucerne can be grown on irrigated lands near the rivers and is used for green horse-feed and hay





Kodachrome



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The horse is still the main element in station management in north-western Australia. Mustering teams of aborigines, used to living hardly and on what the bush will provide, from snake to kangaroo, round up the cattle or sheep according to a seasonal programme. (Above) This team has just mustered 3000 ewes and lambs. (Left) Bringing in a delicacy for the men's evening meal. (Opposite) On sheep stations the lambs are 'tailed' while the ewes are being culled out. When the round-up is over the sheep are driven onto clear pastures, only to be remustered in due course for shearing



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Loading the golden harvest of wool at Noonkanbah station onto diesel road-trains which carry the bales 160 miles over rough bush trails to the coast for shipment from Derby, the nearest seaport

able for further development. The seed of the idea was planted and from it grew, in the hands of enthusiasts who alone can make dreams come true, the killing and chilling plant at Glenroy on the Mount House station of the Blythe family, descendants of the early pioneers who explored and opened up the Kimberleys. The other partner in the enterprise was Australian National Airways (the non-nationalized air corporation of Australia!), pioneers in their own right of air work and air freighting in the continent.

Four years ago the enterprise was born and the material for the Glenroy plant was flown in by aircraft from the large freezing compressors down to the last screw. Vested interests, scepticism, rising costs and above all in the early years an insufficient quantity of cattle from neighbouring stations created the every anxiety and every doubt which attend a new enterprise. About the only thing which was successfully proved was that cattle could be killed and chilled on a station and flown 160 miles in something over an hour by unrefrigerated air freighters to a seaboard

freezer and delivered in better condition than cattle off the 350-mile stock-route. This shouldn't have needed proving, but no-one would believe it till it had been done. In 1951 the output from Glenroy rose to over 4000 head and the enterprise looked economically sound. In 1952 a drought hit all Australia to a greater or lesser extent. Even the North-West, the land of constant and reliable rains, suffered and the stock-routes were awful. But Glenroy killed and despatched more than the 5000 head of theoretical full capacity in its four months' killing season. More cattle were offered for killing than could be dealt with: more cattle could have been killed if the season had been prolonged, which was impossible because the Wyndham freezing plant closed at the end of the normal killing seasons. Without Glenroy many of the central Kimberley stations would have sent no beef at all to market last year. An American visitor's comment was that the Glenroy plant was the sparking plug of the future beef industry of the North-West, one of the few undeveloped beef areas of the world, even if not the last.

The Glenroy abattoir on Mount House station in the central Kimberleys represents the first experiment in killing and chilling cattle on a station and flying the carcasses down to the coast at Wyndham 160 miles by air, as against over 300 by stock-routes that traverse very rugged country which only old cattle are strong enough to cross



The light of dawn has come in the North-West and for a cost in capital which would scarcely build ten miles of railway or twenty-five miles of all-weather road.

Beyond the Kimberleys in the far north of Western Australia is the Drysdale country which few white men have ever seen and where none live except at one mission station in a native reserve. There is room in that country for ten to twenty more cattle stations. These, and all those in the Kimberleys, if underground water supplies are developed, can make an immense contribution to the

meat problem of the world, with twice to four times their present cattle population. The key to their development is transport—air transport—and small processing units where seasonal labour can operate and large-scale permanent housing is unnecessary. The secret of success is in small units, lots of them, around which large herds of cattle will not graze out the pastures and create dust-bowls to be denuded by the seasonal rains, as has happened through over-stocking in certain areas around open water. The regular annual rainfall is enough to provide unlimited water

The Glenroy abattoir and refrigeration plant were flown in down to the last screw and sheet. The plant only operates during a four-months' killing season with staff brought by air for the purpose





Carcass meat is loaded from the cool rooms into a Bristol freighter for transport to the seaboard refrigerator. The telescopic gantry enables the aircraft to be loaded in about twenty minutes

or artificial tanks and dams, for wind-pumped wells and even for riparian irrigated crops; but this land, like all land, needs cherishing and caring about and that means controlled grazing with fencing.

The bird life of the area is more abundant than in most parts of Australia. Animal life is not, as so often in that continent, a problem. There are probably too many of several sorts of the kangaroo species to suit the pastoralist who begrudges every blade of grass and edible bush in the 'dry'; but neither rabbits nor dingos are numerous enough to be a plague. Except for the concentration of the rains in a short period, the climate is excellent and flying weather for nine months in the year is consistently reliable. There may be all sorts of minerals in the subsoil: there probably are, but the country has never been properly surveyed. What there is known to be is beef, and there could be more beef: and that is enough to go on with. Finally, there are still men who believe in the future of the North-West. They are remaking their houses and gardens. They are employing and stabi-

lizing the aborigines who seem adaptable to this life and are numerous enough to provide the station labour needed. They require the support of their own governments and the assured markets which we in Britain can provide.

The trip in the Anson was fun. We came into Noonkanbah on the tail of a monsoon thunderstorm at sundown under a sky which looked as if it had been kicked by a horse. We dodged about among the flat-topped hills of the central Kimberleys looking for stations and patches of experimental crops. Coming down the middle from Daly Waters to Alice Springs we were a bit held up by bad weather and got very cold flying high over cloud, only to be roasted at 105° and upwards on the landing grounds. There are more delectable countries than the central Northern Territories in the 'dry' but none more hospitable and friendly. We were sorry to finish at Adelaide, after a forced landing a couple of hours before a monumental storm, which had crossed the continent from Broome to the Bight, broke over that lovely city.

The Rural Development Movement in Ceylon

by JOHN SEYMOUR

Mr Seymour has often broadcast for the B.B.C. on Ceylon. He first visited that island while in the army during World War II; again in 1950, the results of the latter journey being recorded in The Hard Way to India (Eyre and Spottiswoode); and a third time, for three months, in 1952. The movement which he describes is one of the most significant happenings in contemporary Asia

"WHEN I first came here," said the schoolmaster, "I used to go round with a crow-bar knocking holes in people's walls."

This sounds a little ruthless, but I saw what he meant.

The traditional up-country Ceylon villager's house is a low, two-roomed hut of wattle-and-mud walls, a roof thatched with *kadjan* or woven coconut-fronds, a door in front, one behind, but no windows. The reason for the absence of windows may have been originally fear of thieves, although people will tell you that in the time of the Kandyan kings it was illegal for anyone but a noble to have a window.

At the back of the hut is a lean-to kitchen, also windowless and, furthermore, without a chimney: nearly pitch dark and full of smoke. The schoolmaster's delight had been to go round knocking holes in these wattle-and-mud walls to let the light and air in, and the smoke out.

It may sound surprising that people should let a schoolmaster go into their houses and knock holes in their walls, but it ceases to be so when one appreciates what is implied by the new Rural Development Movement in Ceylon. For this is not a movement imposed from above by the government, or by people from the towns, but something which has grown out of the needs of the villagers themselves. They started the movement, which the government has at last recognized, and is now giving official encouragement.

This is what is so exciting about this extraordinary development. It started apparently spontaneously just before the war, and since then has spread from village to village, completely transforming the countryside wherever it has gone. For there cannot be any doubt when you enter a village as to whether it has what is known as a Rural Development Society, in good working order, or not.

The best way for me to explain what this is

all about is to describe a typical village as I knew it, during the war, before the Rural Development Movement had reached it, and then to describe what I saw last year. The village in question is called Epakanda, and is in the hills a few miles from Polgahawela, in what might be described as the lower Kandyan country. The battalion I was with was stationed in Polgahawela, and I walked out to Epakanda one Sunday for something to do. The path led along the narrow banks of paddy-fields and then rose abruptly into hilly ground planted with coconut-trees, but also badly overgrown with scrub. After a long and steep climb I came to a village: that is, I came to where scattered huts stood among the coconut-trees.

Now I remember noticing how poverty-stricken this particular village was. But with characteristic Ceylon hospitality the inhabitants offered me of what they had. I found a man up a coconut-tree, harvesting the crop, and he shinned down and cut me open a young coconut to drink from. Then he asked me to his house where I was given some small cakes made of *kurukan* flour (*kurukan* is a kind of millet) and a *sambol* made from grated coconut and chillies. The man and his wife apologized profusely that they had no rice, the food which it is usual to offer to a stranger. Their entire rice-crop, they said, had had to go to town to pay off debts contracted while it was growing.

The house was a tumble-down *kadjan* shack, dirty inside, dark and smoky, and outside was the smell that one associates with lack of sanitary arrangements. I noticed a dog lapping water from the earthenware jar on the floor from which a half coconut-shell had been filled for me to drink from. The three children in the house were weak and sickly. Malaria I knew they must have, and dysentery; but it was also probable that they had hookworm.

Last year a nostalgia took me back to

The village schoolmaster is often a mainstay of the Rural Development Society. Although pay is low, men of a surprisingly high standard are taking to the work

Polgahawela, and I walked out to that same village.

But this time I walked along a good cart-track, which crossed over several new concrete culverts and a bridge. And when I reached the high land, where the coconuts started, I thought I was in a different place. For under the coconut-palms the rough scrub had been cleared away and its place taken by banana-trees, paw-paws, tapioca and other food-crops. Trenches had been dug at intervals along the contours of the hills to conserve the rainwater and prevent erosion, and a new young coconut-palm grew alongside each very old palm, ready to take its place when the veteran became too old to yield. Instead of an unkempt, half-cultivated wilderness was an ordered plantation. The land, I decided, has been bought up and developed by some rich man. But I was wrong.

When I reached the village there was nothing there that I could recognize. I looked in vain for the old, tumble-down shacks, but saw everywhere about me new houses: some built of brick with tile roofs, the majority still of wattle-and-daub and kadjan but well-built, nicely plastered, larger than the old ones, amply supplied with windows, and—wonder of wonders—equipped with chimneys. And furthermore they stood in gardens. In front of each house was a flower-bed, and nearby a kitchen-garden—full of those fleshy tropical vegetables which make up the delicious curries you get in Ceylon.

Shortly I came to a school, where no school had been before. It was a long building, also roofed with kadjan, but with brick walls which did not quite come up to the roof. It was full of children, being taught by their master. The master came out as I went



All photographs by the au

up, to see what had distracted the attention of the fifty pairs of eyes in his class, and when he saw me he spoke to me in English. He was a handsome young man with an intelligent, sensitive face. He wore a thin cotton white tunic with no collar and a white cotton cloth about his legs: the clothes of a man who is not a peasant or labourer, but nevertheless does not wish to wear European clothing. He took me in to see the children, and I was delighted at what a healthy, handsome, lively lot they were. I remembered the peaky-looking little chaps I had seen in the village during the war.

The school was a simple enough establishment. There was a hard earth floor, benches and desks for the children, pictures on the walls, blackboards and the usual teaching equipment. The master dismissed the school and said he would show me round the village.



(Above) The house on the right is the old type of kadjan (coconut-frond) village house in Ceylon; that on the left has been built by the House-Builders' Cooperative with voluntary labour. When funds allow the kadjan roof will be replaced by tiles. (Below) Carpentry work for one of the new houses





(Above) *The Community Centre: the first building to be put up by a Rural Development Society, it is used both as a social centre and for meetings. (Below) The Rural Development Officer attends Society meetings only to advise, or to consider requests for government aid with material or professional skill*





Concrete linings and walls for wells, keeping dirty water out, are an important health measure. The Ceylon government supplies the cement, but Rural Development Society members do the work

It is not every day that a stranger comes to a place so far off the beaten track.

We walked over to another building, made of the same materials as the school but half the size. Half of this building was totally enclosed with a brick wall (provided with windows) but the other half was open on three sides except for a low wall, and brick pillars to support the roof. It seemed very unusual to me to find such a well-built structure in a remote village in Ceylon, so far from the motor-road.

I asked the schoolmaster what the building was, and he said it was the new Community Centre. Afterwards I came to look upon such buildings as the symbols of the new Ceylon.

Pinned to the walls of the Centre were a number of graphs and charts, drawn in ink on paper, but written in Sinhalese characters which I do not understand. As I stood looking at all this the children from the school crowded around me, eager to see the strange foreigner, for probably few of them had ever seen a European before. Every now and then the schoolmaster ordered them, quite ineffectively, to go outside. He explained the charts to me, and I wrote down the facts and figures that he gave me in a small note-book. The first of the charts went like this :

Out of 120 householders in the village there were 118 members of something my friend called the *Samiti*, which means society. Of these, 110 had compost-pits, 72

had kitchen-gardens, 54 had flower-gardens, 92 used only boiled-cooled water for drinking purposes, 106 had racks to keep their water-jars off the floor, 46 had water-seal latrines—all the rest had pit latrines; when I was in the village during the war there were no latrines at all—115 houses had been clean when last inspected, 62 householders grew *ayaveda* herbs (*ayaveda* is the local system of medicine) and 103 had refuse-pits.

Another graph showed how the Village Savings Group had saved 14,000 rupees in three years. Another showed the increase in numbers of various fruit-trees, and acres under curry-stuffs. Another showed the proportion of paddy-land being cultivated by improved methods: transplanting instead of broadcasting, Burma-harrowing, fertilizing, ploughing instead of “mudding”. The yield per acre had gone up since the war by just over twenty per cent. Another graph showed the progress of the Cooperative Credit Society, another of the House-Builders’ Cooperative, another of the Farmers’ Cooperative; all bodies started by, and subsidiary to, the Samiti.

Besides the children, grown-up villagers had by now arrived; and they crowded round me while all this was being explained, obviously determined that nothing should be left out. An old man dived into the closed part of the building and pulled out a long banner, made up of a lot of small flags with names on them roughly sewn together into a strip. He explained that the houses of the village were

divided up into four groups, and every month a committee from three of the groups inspected the houses of the members of the fourth group and awarded marks for cleanliness and other qualities. The personal house-flags of the members were then arranged in this banner according to order of merit. *His* flag, the old man assured me, was at the top!

I asked to be introduced to the householder whose flag was at the bottom, and a jolly old man was hauled out amid roars of laughter. I recognized a fellow-spirit at once.

The schoolmaster offered to take me round the houses, and I followed him—accom-



On one-crop-a-year paddy-lands the custom has hitherto been to leave the land fallow. Rural Development Societies now encourage their members to plant vegetables. The villagers believe that such crops must be protected from the evil eye by tall fences

panied by all the inhabitants of the village in a state of great excitement—to see everything that this wonderful Samiti had done.

The new road, that I had walked along, had been built, I was told, entirely with the voluntary labour of the members of the Society. But how were the concrete culverts and the bridge paid for? I asked.

“The government built them,” said the schoolmaster. “Now we have a Rural Development Officer in Alawwa, and he says that if we first build a road, he will send the P.W.D. to build the bridges. That’s the way it was with the school, too. First the villagers built the school, and the teacher’s house, and then the government sent me here. I’m paid by the Department of Education. That’s how it is now. The government won’t help the villagers unless they see that the villagers have helped themselves first.”

“How about the land for all this? Who pays for that?” I asked.

“It’s given free by the members,” said the schoolmaster, “like the material and the labour.”

“Supposing one man refuses to give land?”

“One did when we built the road. So we built it up to his boundary on either side and left it like that. He became so unpopular that after a week he gave in and gave us the land.”

The most delightful thing we saw was the ‘Montessori’ school. This was a smaller edition of the big school, full of little children looked after by a charming young lady who had been trained in Colombo at the training-centre run by the *Mahila Samiti* or Women’s Institute. Outside the building were home-made swings, seesaws, slides and roundabouts, such as one sees in playgrounds in England. While we were there a young elephant came by, dragging a log, and his *mahout* delighted us by making him perform some tricks.

The Mahila Samiti incidentally is one of the most active arms of the Rural Development Movement. In this village it runs, in addition to the Montessori school, classes for women in reading and writing, in hygiene, in various crafts such as mat-making, rope-making and basket-making. The object is to make the village as self-supporting as possible in the goods formerly needed from outside, but sales to the towns of the goods produced are also organized.

I was taken to some houses that were in the process of being built, for people who had previously been landless, under the government’s new settlement scheme. Under this

each landless person is given three-quarters of an acre of high land (that is land on which paddy-cultivation is impossible), and 800 rupees (about £60) for building a house. But instead of letting this money go to contractors, the new House-Builders’ Cooperative had put up the houses with voluntary labour, employing only a mason and a carpenter for the more skilled work. Result: the houses were only costing 250 rupees each, and the balance of the 800 was being divided between the new settler and the Society.

We went back to the Centre, where what might be termed an alfresco meeting of the Samiti was held. The Officers of the Samiti, men of standing in the village (mostly on the young side, I noticed), sat at a table at one end of the building, and as many of the remainder of the population as could crowd in occupied the rest.

Any adult member of the village could be a member of the Samiti, I was told, and all could vote for the Officers: Secretary, Chairman, Treasurer, and the like. All important decisions, too, were debated by the assembled village, and voted upon. As for the children, they had a Samiti of their own, run like the big one.

I asked the reason for the obvious prosperity of the village, compared to its poverty when I had visited it during the war.

“We get a better price now for our produce,” said the Secretary, a go-ahead young farmer who had been to school. “That’s one thing. But the other is that we’ve got rid of the *boutique* keeper.” In Ceylon *boutique* means a country shop, and in former days the boutique keepers were the chief usurers of the countryside.

“Now if we want credit we have our Credit Society,” put in the schoolteacher.

“Also we grow more crops,” said the Secretary. “We farm better.”

Since the Samiti had been formed, I was told, there had been no more litigation—the curse of Ceylon—because any dispute was brought immediately before the assembled Samiti and the case adjudicated there and then. The village also had been free from crime, although at one time it had been notorious for drunkenness and cattle thefts. These vices had entirely died out: public opinion was against them.

Now although this Samiti had been going on for six years, I found the feeling of excitement and interest in it still infectious. It was obvious that Samiti affairs made up much of the interest in the people’s lives. For the first time they were working together:



(Above) *The Mahila Samiti or Women's Institute is often the most active arm of the Society. Here the "W.I." has started a school for small children. (Below) Pottery is one of scores of village industries taught by the Mahila Samiti to enable village women to employ their spare time profitably*





(Above) *This Old People's Home is the result of the combined effort of several villages. Normally Ceylon villagers take good care of their old people, but these may perhaps have lost their relatives.*
 (Below) *Loading a cooperative van. Rural Development has greatly stimulated the cooperative movement*



the village was a corporate unit—not just a random collection of shacks inhabited by half-starved individuals.

I spent the night in the house of the Secretary, and next morning he drove me back to the main road in a hackery-cart, pulled by a little bull. But I was determined to find out more about this strange new business. Accordingly I went to the little town of Alawwa, and searched out the Rural Development Officer. He proved to be a young chap named Wettewe, the son of the local village squire. And he could hardly have been more enthusiastic about his job. "You must stay here a couple of weeks," he said, "and drive round with me and see what we are doing in the villages."

But he meant what the villages were doing for themselves.

"Eighty per cent of the villages in my area have Samitis," he said. I asked him why the other twenty per cent had not, and he replied that in many cases Societies had been started in such villages, but had died out owing to internal feuds and friction. "Some can do it and some can't," he said. "That's all there is to it." A bad village Headman was generally at the bottom of the failure of a Samiti. The government-appointed Headman saw his power threatened by this new thing, and often opposed it—clandestinely of course because he was supposed to encourage it. "The Headman system is a relic of colonialism," said Wettewe. "It's not right for a democratic Dominion."

Wettewe's job was not to start Samitis himself in villages. "I can only go and tell the villagers what a Samiti is," he said, "and then leave them to think it over. If they want to start one they come to me and I show them how to set about it. Then it's up to them. Of course if they want help I try to give it, and at first at least I try to attend their monthly meetings."

"Does it cost the country much to run?" I asked.

"Well, the government give a very limited amount of help, but only if the people have helped themselves first. It will give any man a bag of cement—provided he builds a water-seal latrine with it. It will supply a wireless-set and a library—provided the people first build themselves a Community Centre."

During the fortnight I stayed with Wettewe—living the extremely pleasant life that one leads in an old-fashioned country squire's house in Ceylon—I saw perhaps a score of villages. Some had flourishing societies and some had not. Villages near

towns or the motor-roads were generally the worst, I noticed. I was struck by the variety of the ways in which different villages had reacted to the movement. Certain things they had in common, sanitation and improved cultivation, for example, but in other ways they differed. One had started a village industry—weaving the fronds of the talipot-palm—and the whole village was more or less given over to it, at least as far as the women were concerned. One village, in a part of the country where only one crop of rice a year can be taken, had acres of its paddy-land enclosed by kadjan fences (to keep out water-buffalo and the evil eye) and the land, during the fallow season, was given up to market-gardening and as far as I could see they were making a minor fortune out of it. In another one-paddy-crop-a-year village everyone was busy building a 'tank', or catchment dam, to conserve the rains and irrigate the land so that it would be possible to grow two paddy-crops a year.

Wettewe told me that the organization of the societies was as flexible as the programmes were. "In some cases one man dominates the whole thing," he said, "in others there's true democracy. Some societies work—others don't. Some are very active—others less so."

I tried to find out what started this apparently spontaneous movement. I met an old Buddhist monk who claimed that he had done so. Indeed before the war he had formed an organization in a village near the coast which is still going strong. I met a police inspector who told me that the police had started it—in an effort to break down the traditional hostility between the police and the villager. I met a politician who said that he had started it in his constituency, and from there it had spread.

The truth seems to be that no one factor was entirely responsible. The thing has grown out of a new spirit in the land: in Asia in fact.

Wettewe was limitless in his enthusiasm.

"The time will come," he said, "when lawyers and policemen won't be needed any more in Ceylon. It is said that in Parakrama the Great's time a young girl could walk the length and breadth of the island, laden with jewels, and nobody would molest her. That time will come again."

I hope it will. Certainly, in a year spent wandering about in Ceylon and India, I saw nothing which seemed to me more significant than this spontaneous movement, which is spreading like a benign fire across the lovely countryside of Ceylon.

Canada's Slavic Seasoning

by ANNE FRANCIS

As news commentator, broadcaster on the national network of the Canadian Broadcasting Corporation, and writer in Canadian periodicals, "Anne Francis" has made her name familiar in Canada. During the nine years when her husband, Mr John Bird, now Chairman of the Southam News Services, was Editor-in-Chief of the Winnipeg Tribune, she got to know the Ukrainian-Canadians at first hand

THE land is flat. In every direction the heavy, black earth stretches to the horizon. Small, well-cultivated vegetable farms follow the banks of the wide, slow-moving river. And beyond them the wheat begins.

All summer long women work in the market-gardens. They wear peasant skirts, shawls around their shoulders and bandanas over their heads. Men work in the wheat-fields. They sit high on tractors which plough a rapid furrow and they run combines which reap and bind the sheaves as they go along.

Beside the river banks the houses are close enough together to form a continuous village. Where the wheat grows they are seldom less than a quarter of a mile apart. Most of them are one-and-a-half storeys high and built of logs which have been chinked with mud and then whitewashed. The roofs are thatched. Now and again there is a tiny wooden church with onion-shaped spires, or a small Byzantine cathedral, built of stone and mortar, whose metallic domes glisten under the blue, cloudless sky.

This land is not the steppes of the Ukraine : it is the prairie region of Manitoba in the heart of Canada. The river is not the Dnieper or the Don : it is the Red River of the North whose waters find their way to Hudson Bay by way of Lake Winnipeg. The men and women who work the earth are Canadians.

They are Slavic Canadians who trace their lineage back to the proud Cossacks who for so long tried to win freedom for the Ukraine. These people have jealously preserved much of the culture of the land of their origin, the religion, music, poetry, literature and handicrafts of the Old World. Above all, they have kept their pride of race. And for these very reasons they have made a unique contribution to Canada. What is more they have written a success story in the New World—a story which is a tribute to their own intelligence and courage as well as a justification of the Canadian way of treating immigrants. They have also provided a refutation of the Marxian doctrine of the inflexibility of the class structure in a capitalist society.

The first settlers from the western Ukraine came to seek their fortune in Canada only sixty-one years ago. Today there are about 400,000 Canadians of Ukrainian descent. They belong to the fourth largest ethnic group of people who are more than content to call themselves citizens of Canada. The largest group is Anglo-Saxon, which includes people of English, Irish, Scottish and Welsh stock. The second largest is French. The third largest is German. About a third of the Ukrainians, like their ancestors, belong to the Greek Catholic or Uniate Church which is now called the Ukrainian Church of Canada. A third of them are Greek Orthodox and the rest are Protestants.

Obviously, all Canadians, except the Indians and the Eskimos, are either immigrants or the descendants of immigrants. They came here for three main reasons : in search of adventure, to escape political or religious oppression, to improve their economic and social position. It was not until the latter part of the 19th century that the great influx of immigrants began to arrive from Europe. The Canadian Government deliberately lured them here by giving them free land when it became clear that Great Britain could not supply enough of the kind of people who were needed to open up and settle the vast, empty country which stretched westward for over 3000 miles. In other words, Canada followed the example of the United States after a time-lag of about half a century.

In general most of the Europeans came to the New World to escape the poverty and hopelessness to which they were condemned in the lands of their birth. In particular, the Ukrainians came here to better themselves economically as well as to escape political oppression which had lasted for centuries. Since the days before the Mongol invasion of the 13th century, when Kiev was the centre of a powerful state, the territories inhabited by their ancestors had never known political independence. Stretching from the Carpathians across the vast plains traversed by the Dnieper and the Don, these territories were

ruled in turn or in part by Poland, the Russian Empire and the Austro-Hungarian Monarchy. In 1772, when Poland was partitioned, the westernmost portion went to Austria-Hungary; and most of the Ukrainians who came to Canada were natives of this area.

Although the serfs had been liberated in Austria-Hungary in 1848, at the end of the last century the peasants in the western Ukraine could hardly be called free men. It was almost impossible for them to get an education or to better themselves financially. Most of them walked hand in hand with poverty. A survey made in 1888 showed that the average family income was twenty dollars a year. There was also a shortage of land. Ninety per cent of the farms were less than twelve acres in size and about half of them were smaller than five acres. As the population increased these small holdings were divided and subdivided with the result that, from time to time, chronic hunger turned into starvation.

War and conquest had forced poverty and illiteracy on these people, but they still managed to retain great qualities of body and mind. They were strong, industrious, deeply religious and proud. They were intelligent with a healthy appetite for education. Centuries of political oppression had kept the fire of nationalism alive in their hearts. Inevitably, national pride demanded that they preserve and reverence their own culture not only in their homeland which had so long been under foreign rule but also when they found themselves amid the alien corn of Canada.

In the last sixty-one years, since the first two Ukrainian settlers landed in Quebec after a journey of twenty-two days, there have been three separate waves of immigration from the Ukraine. The first took place between 1895 and 1914, at which time World War I put a virtual stop to immigration from every country. The second wave began lapping at our shores in 1921 and grew higher and higher until the depression brought large-scale unemployment to Canada and forced the government once again to close its doors to newcomers from across the sea. In the ten years between 1921 and 1931, the Ukrainian population more than doubled itself, increasing from 106,721 to 225,113. In the peak year of 1929, 15,000 Ukrainians entered the country. The third wave of immigration is still rising. Since 1946, Canada has welcomed over 800,000 new settlers. About 32,000 of them are Ukrainians.

The first large groups of Ukrainian settlers who came to this country in 1895 were

peasants. The sturdy men in sheepskin coats and the women in ankle-length dresses were pioneers in the strictest sense. They were sent to the Middle West, to the prairie provinces of Manitoba, Saskatchewan and Alberta, in groups of a hundred. Each head of a family was given a quarter section—165 acres. After that the settlers were left to fend for themselves.

The years which followed certainly tried their souls. They could speak neither English nor French and so were completely cut off from contact with their neighbours. They were spiritually alone since the first Greek Catholic priests only came to the country ten years later. (In 1951, the Basilian Order of Monks celebrated the fiftieth anniversary of their coming to Canada.) They had no idea of Canadian agricultural methods since they had been accustomed to cultivating the earth with a single ploughshare and cutting grain with a sickle. Many of them also chose the wrong kind of land. They homesteaded in bush country instead of the open prairie because in the Ukraine wood was at a premium for building and for fuel. Unfortunately, this choice meant that trees had to be cut and stumps burned and hauled out—a long and exhausting process—before they could sow for their first crop. They were also frustrated by lack of capital. By the time they reached the West, some of them did not even have the ten dollars needed to buy a homestead and had to borrow the money from the Canadian Government. This meant that many of the men had to work on the railroads or in lumber camps in order to earn enough money to buy farm equipment and stock.

In spite of the loneliness and the physical hardships which those Ukrainian peasants suffered during their first years in this country, they came through better than Anglo-Saxons could have done because they had "what it takes". They were accustomed to privation. They drew strength from a fierce love of the land. The wide Western sky reminded them of home. Thrown on their own resources, they entertained themselves by singing, dancing, making music and carrying on their traditional handicrafts. They also insisted upon getting an education since the desire for land and the desire for learning were the two things which had made them cross the sea.

Almost immediately, a number of the more literate settlers took a course in teaching. They then returned to the Ukrainian settlements to do three things: to teach the children the English curriculum, to teach them Ukrainian

after school hours, and to teach the parents to read and write in the evenings. In the old country, the school teacher had ranked second in importance to the village priest. This attitude of mind still persists so that today a larger proportion of school teachers is found among the Ukrainians than among any other ethnic group. In recent years, many of these teachers have used their training to branch out into the professions.

As time went on, those first lonely settlers became adjusted to their surroundings. They found a sort of freedom which they had not believed possible, and since little or no pressure was brought to bear to force them to become Canadians, they had a comparatively small reaction against the process of assimilation. A laissez-faire attitude toward different ethnic groups is one of the things which distinguishes the Canadian method of assimilation from the American melting-pot. This attitude is essential in order to preserve the unity of the country because of the large French-Canadian minority group which was already entrenched when Britain took over in 1763. Canada would have been torn apart by civil war long before now if the rights of minority groups had not only been respected but protected by statute.

After Montcalm fell on the Plains of Abraham and Canada became part of the British Empire, the French, living in Lower Canada which is now the Province of Quebec, were granted rights which had never before been given to a conquered people. By law, they were given the right to keep their legal system, their language, their religion and the control of education. In 1867, when Canada became a federation, the Provinces were granted jurisdiction over civil matters and, to this day, woe betide any Federal Government that dares to attempt to infringe upon those Provincial rights.

Although the Canadian attitude toward minorities has made assimilation slower in Canada than in the United States, it has not stopped the inevitable process. Many of the Ukrainians who came to Canada before 1914 kept their own language and customs. On the other hand, their children began to break away from the old way of doing things. The men went to work in lumber camps during the winters and came in contact with people with different backgrounds. The girls went to work as domestic servants and learned new manners and standards from their employers.

It took time and severe growing-pains for the first group of Ukrainian immigrants to fit into the North American pattern. The people

who came here between the two World Wars were assimilated more easily and more rapidly because they found the hard spadework had already been done for them. They found friends and relatives who spoke their language and who introduced them to the agricultural methods which were practised in the New World. They also found their Church and so were not isolated spiritually. Furthermore, about thirty per cent of them were literate and there were a number of skilled workers and intellectuals among this group.

Naturally the process of assimilation was quicker for them and for their children. Compulsory education and an effective public school system gave them the tools of the English or French language. Newspapers and the radio have in recent years helped to bring them in contact with current ideas. And, as a young Canadian of Ukrainian descent said to me the other day, both biology and society act as a melting-pot without our doing much about it. "After all," he said, "people marry for biological rather than nationalistic reasons." Statistics bear out this view. In 1939, 90 per cent of Ukrainian men and 86 per cent of the women married within their own ethnic group. In 1948, only 60 per cent of the men and 53 per cent of the women married within their group.

To me, the most interesting change of all is the way so many of these new Canadians have succeeded in jumping a class in a very short time. By doing that they have certainly proved that in a free country under the capitalist system people are not frozen into the social class into which they were born. Take one typical example. A friend of mine is the son of parents who came here thirty years ago. The mother worked as a servant girl and the father, who had been a peasant, found a job in a Montreal factory. The boy went to public school like everyone else. After seventeen years, the parents had saved enough money to buy a farm in Ontario. Later, the mother, who had been supplementing the farm income with a bit of sewing, bought a store, a dressmaking establishment, in a small nearby town. The son went to High School and then to University where he took his Master's degree in Arts. Today, he holds a responsible government job. In other words, the parents rose from the lower working class to become petty bourgeois land-owners while the son belongs to the intellectual aristocracy which is at home in any drawing-room in the country.

The immigrants who began coming here after the end of World War II are a very dif-



Hamilton Spectator

At a first glance the location of this church, with its snow-covered cupolas in the style evolved by Russian architects from Byzantine models, seems obvious. But the obvious is not always true; and doubts suggested by the rows of fruit-trees are justified. For they are part of the prolific orchards along the shores of the Great Lakes in southern Ontario, to which many of Canada's 400,000 citizens of Ukrainian origin have migrated



Nicholas Morant, from Paul Popper

Nearly all the Ukrainian-Canadians settled at first in the prairie provinces of Manitoba, Saskatchewan and Alberta, where the broad plains under a wide sky, the cold winters and hot summers, recall the land whence they came. Here they have shown their native skill as farmers



Roy Hromada

But they soon began to adopt the habits and master the techniques of the New World. Peter Stohun, born in the western Ukraine, emigrated to Canada in 1947 and saved up enough capital to establish his own business: an electrical appliance store now valued at \$4,000.



To the new land Canada's Ukrainian immigrants brought a treasured heritage of dance and song. (Opposite) The vigour and liveliness of Ukrainian traditional dances and costumes contributes to the gaiety of a festival held at Edmonton, Alberta

(Below) Another festival in Winnipeg affords an occasion for fellow-Canadians to appreciate that exquisite harmony of male voices which has for so many centuries been preserved and developed in the Greek Orthodox and Uniate Churches' liturgies

Winnipeg Tribune









National Film Board of Canada

Her Majesty's Canadian Navy draws many recruits from the great plains in the heart of the country, perhaps a thousand miles from salt water, and they make excellent sailors. Born in Alberta of Ukrainian parentage, this is one of the prairie lads who have answered the call of the sea

ferent type from the people who came here during the two previous immigration periods. They are professional people, skilled workers, opera singers, ballet dancers, scientists, college professors and the like who were picked from the concentration camps of Europe by the International Refugee Organization. These displaced persons had been brought to Germany as slave labourers during the war and later they had escaped to the Western occupation zone. They are violently anti-Communist because they have first-hand knowledge of Communism and so it would have been tantamount to a death-sentence to let them go back to the U.S.S.R., which now includes within its frontiers practically the whole area inhabited by Ukrainians in Europe.

These people have adapted themselves to Canadian life even more rapidly than members of the second group of immigrants. For instance, one young man, who came here in 1947, recently represented all Canada at an international youth conference. Others have married into the best "old Canadian" families.

Although most of the members of the three groups are primarily Canadian they are often at odds on political grounds: not Canadian, but Ukrainian politics. Some of them are republican nationalists. Others are monarchists. Still others are socialists, radicals or communists. But as the years pass they feel divisions based on European politics less and less keenly. Certainly members of the two earlier groups and their children act as Canadians first in the pinches. 10,000 of them enlisted during World War I; 26,000 of them put on uniform during the last war.

In fact, I think it is fair to say that the rank and file react to life much the way the rest of us do. Like the members of other ethnic groups, the young people are leaving the country to find work in the cities, while many farmers are leaving the prairies to raise fruit or run vineyards in the wine-growing country down on the Niagara peninsula in Ontario, or to make their homes in the milder climate of British Columbia. 60,000 of them have left the wheat-growing province of Saskatchewan during the last ten years. In 1941, there were only 7100 of them in British Columbia, today there are 23,000. The Ukrainian population of Ontario had doubled during the same period. Obviously these descendants of pioneers, who knew the ultimate in privation, like luxury and comfort just as much as the rest of us and they are getting it.

In recent years, Canadians who belong to other ethnic groups have begun to wake up

to the fact that we owe much to these people. We now realize that their strong backs and hands helped to open up the West, and that their culture, so carefully preserved over the years, has given a flavour to Canadian life. The evidence of their cultural contribution is everywhere around us. Ukrainian-Canadians have provided many of the light, fantastic toes of the Winnipeg Ballet which gave a command performance when Her Majesty the Queen visited Canada in 1951. The founder of our best ballet company, Gweneth Lloyd, deliberately chose Winnipeg as the place to start a ballet school when she came to this country about fifteen years ago, because of the large number of Slavic people who live in the "north end" of the city. She felt, and time has proved she was right, that they were the Canadians with the temperament and the stamina which are needed to make a dancer.

It is also apparent that when you scratch a Ukrainian-Canadian you find a musician. I doubt if any symphony orchestra in the country could carry on if it lost its Ukrainian musicians. The annual Winnipeg music festival is the finest in Canada chiefly because so many of the school children are steeped in the old tradition of choral singing. What is more, the Ukrainians, Poles, Germans and Jews who live in the "north end" love to listen to music as well as to make it, with the result that the capital of Manitoba is the most musically literate city in Canada. Any first-rate musician can be sure of packing the big, modern civic auditorium with 2800 critical and enthusiastic listeners.

There is a flourishing Ukrainian literature and a lively press. One scholar estimates that as many as ten thousand poems have been published in Ukrainian newspapers since the beginning of the century. At the present time there are about thirty-three Ukrainian-language newspapers—two of them are printed partly in English.

A growing number of Ukrainian-Canadians are prominent in academic circles. They have made great theoretical as well as practical contributions to agriculture: Canadian research centres and experimental farms have been supported by a group of outstanding Ukrainian scientists who are authorities on such subjects as soil erosion and dairy farming.

The fact is that these citizens of Slavic blood accept us and we accept them. The genius of these people is like seasoning in the slow-boiling Canadian *pot-au-feu*. Indeed, it is more than seasoning: they give body as well as an essential flavour to Canadian life.

The Internal Combustion Engine in India

by WOOSTER COWEN

The author has spent twenty-six years in the East, the last eight years as Superintending Engineer for the Burmah-Shell Oil Storage and Distributing Company of India Ltd, whose activities are so intimately linked with the developments in India's life to which the present article relates

INVARIABLY, the visitor to Bombay is taken to the top of Malabar Hill after dark to look down on the "Queen's Necklace", to give the glittering crescent of the Marine Drive its more romantic name. Hardly less impressive is the scene by daylight, particularly during that hot, still hour of the morning—the hour between breezes—when the calm bay is just beginning to steal the blue of the sky, and the tall blocks of flats throw long shadows across the road to the sea wall.

At this time of the day there is little traffic, but soon the stream of city-bound cars will reach as far as the eye can see. There will be high-powered American saloons, many with but a single passenger, small family cars with six or seven, jeeps, motor-cycles and station-wagons with their load of civil servants or lady secretaries. To most, or perhaps all, of the occupants of the fast-moving vehicles the scene is a familiar one, but a visitor could not fail to be impressed by the splendid sweep of the dual carriageway and the seemingly endless blocks of flats. Suddenly his attention might be caught by a wriggling, brown-and-white line running diagonally across the front of a half-finished building. As he drew near, the wriggling line would resolve itself into a sort of Jacob's Ladder, a human chain of forty or fifty men and women swiftly bending and lifting, and passing little baskets of concrete from hand to hand, up and up, to be emptied onto the growing roof-slab by the last man in the chain.

Our visitor might then be more than impressed; he might be shocked by the glaring contrast between his own cool progress and the effort required to raise the heavy, dripping baskets. Yet India is traditionally a land of such contrasts: extremes of wealth and poverty, of climate and scenery, diversity of race, religion, language, custom; and in spite of the long-sustained pressure of powerful unifying influences, both political and cultural, and the wide and rapid growth of

communications, it is my belief that she will remain so for a very long time by reason of her size, her ever-increasing weight of population and that peculiar spiritual quality of her people, which is hardly conservative, and not quite sentimental, but rather a capacity to accept change without experiencing it.

Curiously enough, the internal combustion engine, which has annihilated distance and can lift such a load from the shoulders of man and beast, everywhere serves to accentuate the contrast between the old and the new. Take, for example, its use in the air as the means of propelling an aeroplane, with particular reference to the national airlines which now link all the major Indian cities by regular and frequent services. Whereas the Indian lady for whom orthodoxy and family tradition prescribe *purdah* could still conform to it in a railway carriage or a motor-car, it would be quite impracticable to provide for her requirements in an aircraft. So the contrast between the orthodox Indian lady and her 'emancipated' sister or daughter becomes greater than ever.

Again, the network of internal air services has welded together a dozen centres of industry, hitherto far too distant from one another to share a common interest, into a single business community; yet the picture presented by the concentrated industrial activity of the main ports and a few pockets of industry near the mines and coalfields is totally misleading. India is a vastly dispersed agricultural country, and one only has to make the thousand-mile journey from Bombay to Calcutta by air to realize that the tall chimneys stop a mile or two east of Bombay and do not start again until the banks of the Hooghly are in sight. For the rest, hour after hour, an immense physical map is unrolled beneath one's feet, pockmarked with tiny villages where the land will bear a crop, or relieved only by the hills and the winding river-beds in the long, dry



All photographs from the author

The Marine Drive, Bombay: the endless stream of privately owned cars shows only one aspect of the many changes, amounting to a renaissance, that the internal combustion engine is bringing to India



(Above) *The aeroplane has introduced a minor revolution in India: it is not possible for ladies to travel in purdah in an airliner as it was (left) in the traditional bullock-cart or in railway trains and motor-cars. The increasing popularity of the newest form of transport thus hastens on 'emancipation'.*

(Opposite) *The internal combustion engine is also responsible for a complete change in road-construction. Nearly 250,000 miles of roads have been built for motor traffic, though they still carry, and are lacerated by, the steel tyres of creaking bullock-carts*

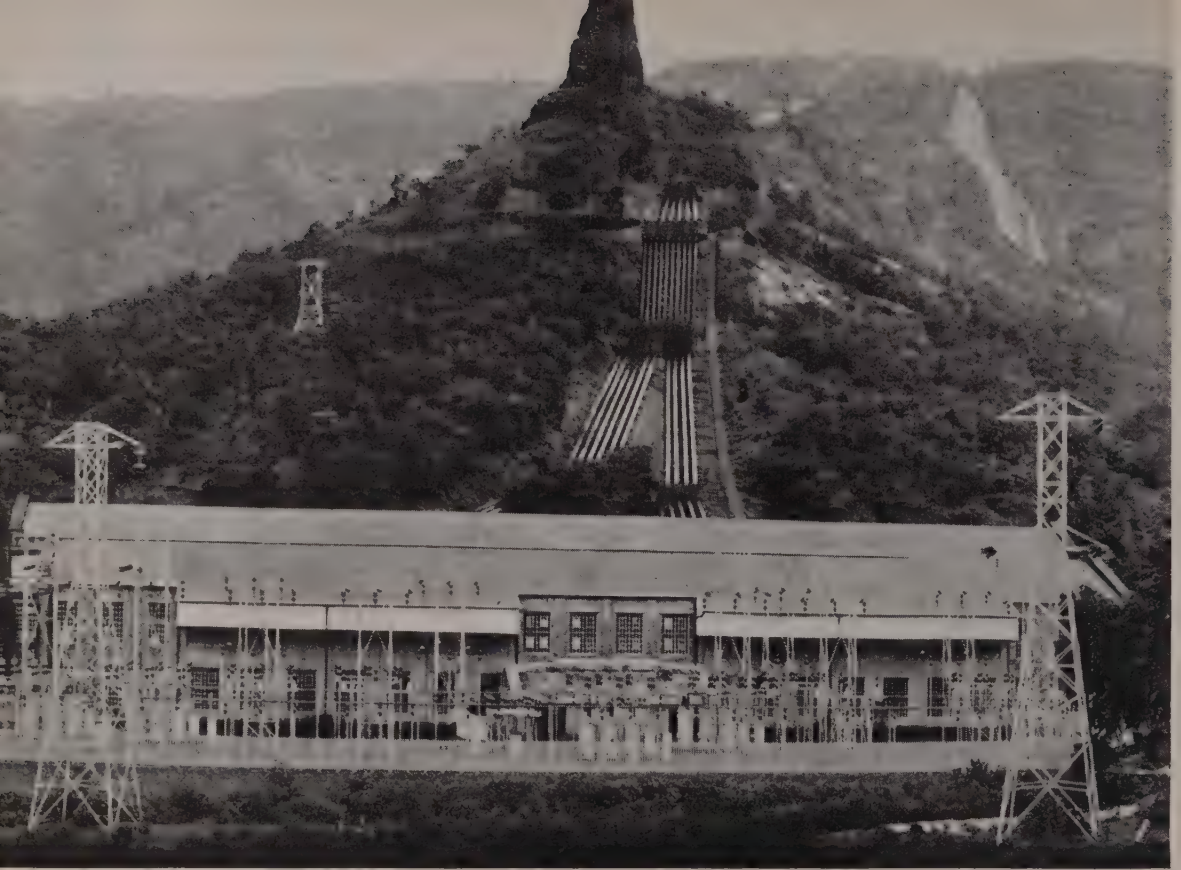
stretches of scrub or open jungle.

Across this immensity there are railways—35,000 miles of them, begun in 1845—and roads; but until the present century the roads were the same dusty, rutted tracks that the bullock-cart had followed from time immemorial. Where the monsoon rains turned them into quagmires there would be metalling of sorts, perhaps even blocks of stone, carefully dressed and laid in Roman fashion. The coming of the motor-car in the early part of the present century, however, created the need for an altogether different type of road. It had to be stronger, straighter, smoother, properly graded and capable of being used by fast traffic in all weathers. The ancient highways followed the contours where they could, regardless of distance and time. So new routes must be found to scale the mountains and span the ravines. A new science had to be learnt and new materials procured. Quarried stone in great quantities, coal-tar from Bengal and Bihar, natural asphalt from Trinidad, bitumen from the distillation of petroleum, cement from Indian factories; all were needed to build nearly 250,000 miles of road, of which roughly 100,000 miles have a hard all-weather surface.

The bus now takes over at the railway station; but, as an indication of what remains to be done, there are only 205 miles of road per 1000 square miles against a corresponding figure of 1949 for Great Britain. On a population basis this represents 75 miles of road for every 100,000 people against 376 in Great Britain. Approximately 200,000 motor vehicles, each propelled by an internal combustion engine of one sort or another, are now in operation on the roads of India, but for each one there are 40 bullock-carts to dislocate the faster traffic and lacerate the costly surface with their narrow steel tyres. 200,000 vehicles is not a bad beginning, but it is only a beginning, and represents a mere 62 per 100,000 population against 5590 in Great Britain and 26,000 in the U.S.A.

As the roads designed for the motor-vehicle spread, so will the changes that it brings. Already, besides the publicly or privately owned buses that radiate from every small town, rural communities in the remotest places are taking readily to the motor-lorry, capable of carrying so much more than a bullock-cart and so much faster. In the towns there is the tradesman's van and the small car not beyond the means of a junior executive;





(Above) One of the hydro-electric stations which supplies Bombay. Mechanization, which reached India in the form, amongst others, of electricity, is being immensely accelerated by the internal combustion engine; its first importance is in the battle for food, the tractor (below) being in the front line—





—while the modern earth-moving machinery for which it provides the motive power is the heavy artillery, making possible vast new irrigation works. (Above) A mechanical shovel in operation on the Bhakra-Nangal project

while on their outskirts it has become a usual and a happy sight to see a middle-class family of father, mother and four or five children, all packed into a 12 h.p. car and heading for the beach or the open country.

Mechanization had reached India in many forms before the internal combustion engine. I have mentioned railways: the use of steam and electricity was also well established in the industrial centres before the turn of the century. Dams and barrages have been built to

harness the great rivers and transform huge tracts of barren wastes into rich, food-growing land. It is just half a century since the first hydro-electric scheme in Asia was built on the Cauvery River at Sivasamudram in South India in 1903. Today Bombay City is entirely lit and powered by a group of hydro-electric installations using the water of five lakes. Such projects already generate electrical energy amounting to nearly a million horsepower, the greater part of which is used to

light the cities and drive their mills and factories, electric trains and trams; it represents, however, but a fiftieth part of the energy which could be produced in India from this source.

Now the speed of development is to be enormously accelerated. Work has actually commenced on a gigantic national plan to cost over £1550,000,000. The object of this plan is not only to make India self-supporting in the staple foods of her population, which today stands at 360,000,000 and is increasing at the terrifying rate of 4,500,000 a year—in itself a prodigious task—but also to strike at the very root of the matter by bringing about the substantial improvement in living standards, which experience in more highly developed countries has shown to exercise a braking effect on the growth of population. It is a battle against time. The situation *can* be brought under control, but will that be before the last arid acre is made to bear a crop? First, food is wanted in enormous quantities, and hands alone cannot claw it from the unwilling earth.

Of the £1550,000,000 approximately one-third is to be spent in the field of agriculture itself, on tractors and agricultural transport and machinery. Arterial transport and communications, including railways, roads, ports and harbour installations, all vital to the success of the work in the field, claim rather more than a third, and the huge, basic, multi-purpose projects a large slice of the remainder. These multi-purpose projects are designed to reclaim the waste land, control the monsoon flood-waters that yearly do untold damage, bring life-giving irrigation to thousands of square miles and increase the rate of reforestation. They will also produce quantities of electric power for a more mechanized agriculture and for the cottage industries. Three of these schemes, now in hand, will bring well over 6,000,000 acres of new land under irrigation by 1956-7, and will increase electric generating power by 700,000 kilowatts. They are estimated to cost £117,000,000.

The mighty dams, the irrigation schemes with their widespread and complicated system of canals, call for excavation and earth-moving on a scale only made possible by the use of up-to-date machinery. Here is work to which the modern combustion engine is ideally suited. Generally in the form of a diesel it provides the motive power for bulldozers and graders and the mammoth 'walking draglines' capable of lifting 30 or 40 tons of earth at a single bite. Such machines are the heavy artillery in the battle for food. The

tractor and the lorry are in the front line, where victory will turn on the skill of the husbandman.

No other milestone in the march of mechanization has so radically altered the outlook of the villager, or stirred him so profoundly, as the coming of the tractor and the lorry. The large-scale irrigation and electricity undertakings gave him water and, possibly, light. The industrial centres manufactured better tools than he could fashion himself. The crowded train made travel quicker, although perhaps at the expense of comfort and peace of mind. But there was nothing personal about these things. They were provided and controlled by Government or "The Company". A steam-engine with all its necessary paraphernalia of boiler, pipes and valves was not much use to a farmer, but a compact little engine that used petrol or oil, that was complete within itself, that could not only stand still and drive a pump but could move across his fields pulling behind it the wonderful new agricultural implements, was quite another matter. Here was something a man could possess and use to help him with a hundred tasks.

The internal combustion engine has made power a domestic thing to be owned and controlled by simple folk. The big ports and cities have developed and changed out of all recognition in a man's lifetime, but the villages and village life had changed little since the invention of the wheel until the coming of this machine. Its influence is due not only to the important mechanical fact that getting about is easier and quicker for everybody, or that heavy loads can be moved in less than half the time it used to take and at a fraction of the effort. It goes much deeper than that. It is a rapidly dawning realization that man was not meant to spend his days in unchanging labour of the kind that warps the body and kills the mind. With a machine at his command he can do so much more between dawn and dark that the fruits of his labour are plain to see. Initiative is born and, as every craftsman knows, creative manual labour brings a satisfaction which cannot be counterfeited. There is time for other things as well—for thinking and planning—and leisure is transformed with the change in outlook. It is no longer a mere resting of the weary body. There are things to do, and see, and learn about.

The internal combustion engine is carrying more than the doctrine of mechanization into every home. It is bringing about a renaissance.

The High Commission Territories in South Africa

I. Swaziland

by SIR JOHN HOULTON



Ektachrome

All photographs by

The Queen-mother of Swaziland, with one of her daughters and a son of the Paramount Chief

The government and people of the United Kingdom are directly responsible for three territories adjacent to the Union of South Africa. Discussion of their future has to be conducted in terms not only of their political status but also of their actual situation and needs. These will be surveyed in three articles by Sir John Houlton who, after a distinguished career in the Indian Civil Service, visited each of the territories and has now bought a 400-acre farm in Swaziland

ON the voyage to Cape Town the conversation turned one evening to the three High Commission territories in South Africa—sometimes loosely called the Protectorates. A man who knew them well was talking about their isolation and the peculiarities of their peoples. "How did they come to be so different from the rest of South Africa?" someone asked. It was a shrewd question. The answer to it, as to many of the knotty problems which confront the world today, is

partly historical, partly geographical and partly racial. The people of the territories are indeed like jetsam cast up by the tides of black and white conquest into three backwaters in southern Africa.

Some things they have in common. The people are branches of the same great racial group; they are all, though enclosed or partly enclosed within the Union of South Africa, controlled directly from Great Britain through her High Commissioner, and their



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Scenes at the great annual festival of the Swazi people, the Nquala, or the eating of the first-fruits of the harvest. (Above) Ladies of the royal household attending the Nquala. (Left) One of the King's body-guard in full dress. At this impressive ceremony several thousand Swazi warriors are on parade, in their uniform of plumed head-dress, shield, leopard-skin kilt and staff



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(Right) The last of the hereditary assegai-makers of Swaziland. His village, Dhlangueni (above), is in wild mountain country, near the burial-place of Swazi kings. In the most inaccessible parts of these mountains there are caves in which the Swazi people used to take refuge with their herds if danger threatened, as in the days when raiding Zulu armies penetrated into Swaziland



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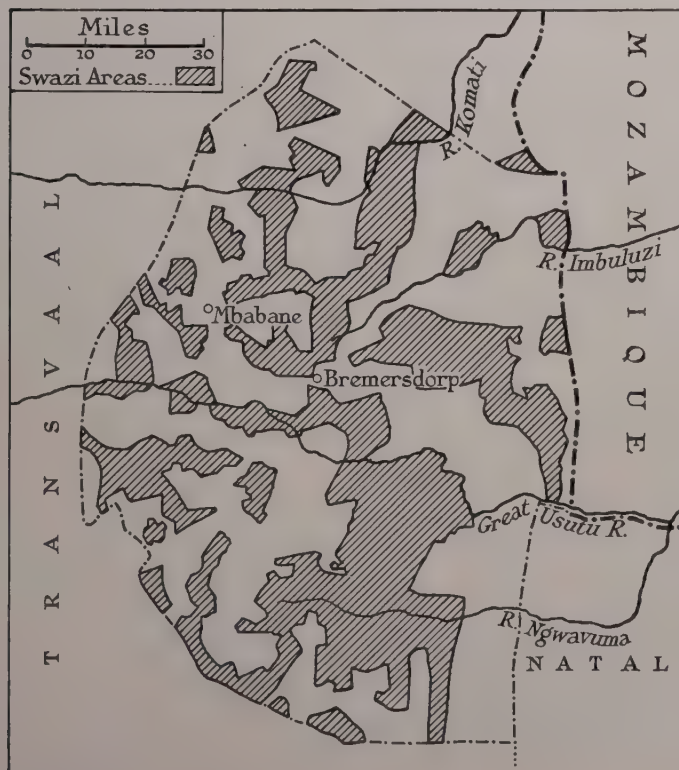
In the upper reaches of the Great Usutu River, near the area where the Colonial Development Corporation has started a vast afforestation scheme. This is one of the four large rivers which flow through Swaziland to the Indian Ocean, and it has the distinction of carrying the biggest volume of water of any river in Africa south of the Zambezi

political future must be closely interwoven; but the differences are very great, and each has its own special problems. I learnt many astonishing things during my tour through the territories, and saw much that was stimulating and full of hope for the future, and some things that were disquieting. If Swaziland is, economically at any rate, the good boy of the three, Basutoland is one which had almost gone to the dogs, though there is now a fair chance of salvation; and Bechuanaland is the problem child.

I came into Swaziland from the south, along the coast road that took me through the biggest of the Native Reserves of the Union, the Transkei; and then across the grassy plateaux of Pondoland, where the men ride fine ponies bought in Basutoland. For a hundred miles I passed through the rolling hills of Natal, covered with vast expanses of sugar-cane and



A. J. Thornton



A. J. Thornton

occasional banana groves; and then through the scattered Zulu reserves, where the remnants of a proud race try to keep up a shadow of their old tribal system. Thence I came into the low veld country of southern Swaziland, and as the road climbed onto higher ground, the middle veld, I began to see on the horizon the clear blue mountains of the northern districts.

The most attractive part of Swaziland from a scenic point of view is the mountainous north-west. But there is also some beautiful scenery south of Mbabane, the capital, where the road passes below two mountains crowned with the peaks mentioned by Rider Haggard and known as "Sheba's Breasts". Roads are still rough and untarred, and often badly corrugated, and in the north they often have the most fantastic gradients. If Chesterton's rolling English drunkard fol-



The Vale of Swaziland from near the capital, Mbabane. The view looks southwards down the escarpment towards the middle veld. The twin peaks seen in the distance are known as "Sheba's Breasts"

lowed a circuitous course while laying out the English roads, his opposite number in Swaziland seems to have made for the steepest part of every mountain in the vicinity, scorning the easy way round.

In the 1880s Swaziland nearly fell into oblivion through the follies of one of its chiefs. This profligate ruler gave away almost the whole country—forests, minerals, grazing, the land itself—in the form of concessions to white men, in return for trivial payments. The country was rapidly falling into anarchy when the British government and the Republic of South Africa (the Transvaal) entered into an agreement whereby the Republic obtained certain rights over the country. With the conquest of the Transvaal these rights passed to the Crown. Some of the concessions were cancelled but two-thirds of Swaziland remained in the hands of foreigners. The Swazis were dismayed, for they did not believe that any action of their king could ever deprive them of the physical possession of their land, which belonged to the Swazi nation; but their appeal to London was in vain. The deep-rooted feeling of mistrust of the white man's policies which this episode

engendered has never entirely disappeared. The area of land available to the people has since that time been increased to about half the total area of the country through purchase of land and grants of Crown land to the Swazi nation.

So now there is this peculiar situation in Swaziland: the European areas and the Swazi areas are scattered about the country like a patchwork quilt. This makes administration more difficult but it has had some good results. For one thing it has made possible some of the great development schemes which have been started in the last few years. It may also partly account for the good relations which exist between the two communities—more friendly relations, in my opinion, than in any other part of South or East Africa.

The chiefs are still powerful. At the head of the hierarchy is the Paramount Chief, a man of education and intelligence, and with him the Queen-mother who has certain semi-priestly functions. Their influence has rested in the past partly on their rain-making powers, celebrated in this part of Africa. But the great influence of the Paramount Chief

and his council is felt in all matters affecting the Swazi people. The new system of native courts presided over by picked men, not necessarily chiefs, is likely in time to undermine the influence of the chiefs, but adherence to the old ways of the tribe and belief in witchcraft are still strong.

Speaking of rain-making, the story is told of the time when the ground-nut experts in Tanganyika tried rain-making with the aid of aeroplanes. Someone told an old Swazi chief, who happened to be a noted rain-maker, about this. "Aeroplanes," he sneered. "Give me a sharp knife and a red cock to offer up and I'll make ten times as much rain as they can with their aeroplanes."

In the more remote parts of Swaziland the people still keep to their brightly coloured costumes and head-dresses, and some of the accompanying photographs show the beautiful dresses still worn, but more and more

people are taking to drab European dress. Many of the men go about wearing the steel helmets which they brought from the mines. The older beehive type of hut is similar to that of the Zulus; it is skilfully made of grass on a light framework and is easily moved from place to place. This type is becoming rare, and most of the huts are similar to those of the Basuto, with wattle-and-daub walls.

The custom of polygamy is still fairly common in Swaziland, as among most of the Bantu peoples, but it is declining on account of missionary opposition and for reasons of expense. The custom is defended by many people who know the Swazis well, including Mr B. A. Marwick, who in his ethnological account of the Swazis points out that women have always outnumbered men and that under polygamy all women were married and had a respectable position in society—each with her own house and piece of land—

Much of Swaziland is mountainous and the roads for the most part are rough tracks: a Land-Rover negotiating difficult country near the burial-place of the kings. Rivers flowing from these mountains are to be used for development "on a scale that will rival the Tennessee Valley enterprise"





Afforestation, irrigation, mining and farming are bringing about "a kind of economic revolution" in Swaziland. (Above) A nursery of young pine-trees grown preparatory to being transplanted onto the mountainsides. (Below) A bulldozer clearing bush at the Mpisi experimental cattle improvement farm





(Above) Swazi women and girls clearing the young rice of weeds at the Swaziland Irrigation Project, which was started by the Colonial Development Corporation. (Below) Digging irrigation channels and making sluice-gates for new rice-fields. A few months ago this ground was bush and forest land





(Above) A cattle sale in Swaziland. At these, held frequently under government auspices, Swazi farmers obtain excellent prices for surplus stock. (Below) Swazis at the Mpisi experimental cattle farm admiring a bull, one of the indigenous Nguni breed which is noted for hardiness and longevity



while the unmarried woman has a very hard life. The same author asserts that polygamists are a happy lot and may be recognized by the fact that they run singing to their work!

Primitive and backward ideas are indeed still strong in Swaziland, but at the same time a kind of economic revolution is going on. That fairy godmother of the colonies, the Colonial Development and Welfare Fund, has put its hand into its pocket—or rather into that of the British taxpayer—and is giving Swaziland grants exceeding £1,000,000 over a period of ten years, for various schemes for the benefit of the country. The baldest statement of some of the larger economic developments in Swaziland would come as a surprise to most people. The exports from an asbestos mine in the north, the Havelock mine, were valued last year at £1,500,000. There are vast deposits of haematite ore, and gold and tin are found: alluvial tin working is carried on fairly extensively. Tung-oil is a growing industry—the territory contains one of the largest plantations of tung-trees in existence—and large-scale growing of bananas, avocado pears and other sub-tropical fruits for export is making spectacular progress.

It is claimed that the afforestation scheme started by the Colonial Development Corporation forms the world's biggest block of man-made forests. Two commercial companies have almost as large an area under afforestation. Pine-trees have been planted on vast expanses of grassy highlands where there were no human habitations and nothing grew except a sour type of grass. This is no ground-nut scheme. Pines have been growing in this area for twenty years, and large-scale plantations were started several years before the Colonial Development Corporation appeared on the scene. The strong growth of these trees (you can almost see them grow) gave the "all clear".

There will soon be a thousand miles of roads in the forests. Fire-lines 400 feet wide divide up the country, and in the Peak Timbers area in the north the hills are crowned with fire-watch towers connected by telephone and manned night and day. The Colonial Development chiefs have not yet made public what they intend to do with the wood—whether to export it as timber or to set up a large pulp mill—but whatever they do they can't go wrong this time; there is only one proviso: there must be a railway and it must come soon.

Four great rivers flow towards Mozambique and the Indian Ocean through this favoured land. Little use has been made of their water in the past, but a great change is now taking place. Several very large irrigation schemes are under construction or are being planned, and there is a possibility that before many years have passed the Great Usutu River may be harnessed for water and power on a scale that will rival the Tennessee Valley enterprise.

One of the irrigation schemes which has made rapid progress is that which the Colonial Development Corporation has started down on the plains near the Mozambique border. This is a most ambitious and promising food project. When the dam over the Komati River is completed 50,000 acres of land, most of it now bush and waste land, will ultimately be irrigated and large crops of rice and many other paying crops, including maize, cotton, fibres and ground-nuts, will be produced. The scheme has the great advantage of having a brilliant and experienced young man at its head. He and his staff have not wasted any time. While miles of bush are being cleared with bulldozers and the dam and channels are being planned, crops have been grown and harvested on a surprising scale: they recently marketed their millionth pound of rice, and work started only a little over two years ago. A whole town is springing up in the bush, where herds of buck still roam.

Swazi agricultural methods are still of the most primitive; their cattle are their first love and the land is a poor second. Government officers are trying to improve the methods by help and example, but it is uphill work. At the Mpisi cattle improvement station I saw the fruits of several years' intensive work beginning to show. The aim is to improve by selective breeding the fine indigenous breed of Nguni cattle, instead of trying to improve the local breeds by imported bulls.

Another useful organization collects milk at over a hundred separating stations for a large butter-factory, which is already producing 350,000 lbs of butter a year. The problem of providing land for native farms is being tackled with refreshing energy under the Swaziland Land Settlement scheme, and well over 100,000 acres are in process of settlement at the present time. All these schemes will prove of inestimable benefit to the Swazi people.

New Zealand Today and Yesterday

What the Immigrant Finds

by ALAN MULGAN, O.B.E.

Of immigrant farming stock, Mr Mulgan has long been engaged in interpreting his country to itself and to the world at large: as Literary Editor of the Auckland Star, Supervisor of Talks in the New Zealand Broadcasting Service, author of A Pilgrim's Way in New Zealand, of the official centennial history of Wellington and of several other works of national and provincial history

"NEVER mind, Mary, you're back in the land of the free," was the consolation offered by her family to a New Zealand woman who was commenting forthrightly on transport difficulties that had marred her first homecoming from abroad, in 1952. A Monday holiday, which ironically enough (to strangers if not to New Zealanders) was Labour Day, plus the usual Saturday break, had delayed the landing of her motor-car. "Land of the free?" she retorted. "You mean land of the freaks!"

New Zealand is a freakish country, from its geographical foundations. A thousand-mile-long island group, no part of which is more than about sixty miles from the sea, it lies where the confidently calculated Great Southern Continent should have lain to balance the globe's other land masses. On a world map it is apt to look inconspicuous and forlorn, so that an American who had had it pointed out to him by a perfervid New Zealander asked: "What happens when the tide comes in?" It would have to be a very high tide, for New Zealand is largely up on end. It is a freakish land in its bounteous natural variety: magnificent peaks, glaciers, mountain lakes and fjords; volcanoes, hot springs and earthquakes; a botanist's paradise; flightless birds; the widest basis for outdoor recreation, from yachting to mountaineering; and a climate that has made it the dairy farm of the Empire and is ranked by an English authority as the world's best for human energy and general happiness. And Europeans found in the Maori a native race with very remarkable qualities of body and mind. European and Maori have long since established a working partnership, in which the Maori enjoys full legal and political rights, and there is a good deal of intermarriage. The Maori has been largely Europeanized, but his leaders urge him to retain the best of his culture.

The main and simple reason why emigrants did not rush this paradise in swarms was distance from Europe. Until the eighties emigration to New Zealand meant months in a sailing ship, and by sea it is still a matter of weeks. However, the extreme distance was selective of initiative and courage, and candidates for organized emigration from the Homeland have always been screened by authority. The small society born of these migrations (it reached the two million mark in 1952) has produced a freakishness of its own. It claims to have been in the vanguard of higher education for women; to have been the first country to give votes to women, pay old age pensions, set up a Department of Public Health, and settle industrial disputes by compulsory arbitration; and to have the largest per capita trade in the world. Its death rate is very low and expectation of life very high, and its Social Security system served as model for Lord Beveridge.

For people living in natural surroundings so lovely and exciting, New Zealanders may be considered tame. They are a quiet people, very kindly but somewhat inarticulate. Yet a sense of the violence of their environment is creeping into their minds. "I went to the English Bath", says a New Zealand woman, "and there I saw the Roman bath, with warm water trickling in and goldfish swimming in it, and I thought of the hell of steam and boiling mud at Tikitere, near Rotorua. Yet I prefer Rotorua." This New Zealander's son, aged fifteen, explained the defects of a rival house at his boarding school thus: "You see, Mum, when there's an earthquake a bit of strata sometimes gets stuck up out of place different from the rest."

These quiet people have been lions in war. Their devotion to Britain is such that they have been described as more loyal than the Crown. Also their contribution to the world's



Anscocolor

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New Zealand offers a very wide range of outdoor recreation. (Above) A climbing party at an accommodation hut near the Fox Glacier, Southern Alps, which ends only a few hundred feet above sea level. (Below) Rod fishermen with a "big-game" catch in the beautiful Bay of Islands in the extreme north



Clusters of state-built houses overlooking Wellington harbour. The government is at present building about a fifth of the total number of houses being put up in New Zealand each year; these are normally for letting, but tenants have the right to purchase





Anso

New Zealand's output of butter and cheese is enormous. This is due first to climate, and then to fertility, good farming and general organization. This dairy farm has been carved out of the bush in Westland, an area comparatively recently developed for dairy farming. The tall trees which give it an old-established air were left when the bush was cleared, but the Lombardy poplars are a decorative addition to the scene



Ansicolor

The Maoris still have a strong tribal sense and seize on any appropriate occasion to dance and sing in the traditional way. Their leaders encourage these demonstrations of their old culture

peaceful progress has been extraordinary in quality and variety. As one who has studied the success of New Zealanders abroad, I believe there is substantial basis for statements made by a New Zealander in 1952, that "there was not one line of human endeavour in the last fifty years which a New Zealander had not been the first, or among the first few, to investigate," and that every one in his list of eminent New Zealanders was regarded as "the world's leading authority in his field." Of course there are dark spots. Our public drinking habits are apt to be "nasty, brutish and" (especially at six o'clock closing time) "short", and they are widely recognized as such. Having failed to extinguish the book-maker as the totalisator's rival, the state has opened totalisator betting shops. However, let us cherish, as an ideal, the tribute of a distinguished visiting Canadian, that this is "the clean and lovely land of the faithful."

Immigration should be considered against these backgrounds, permanent and changing. To be happy the immigrant must fit into both. The days of tents, grass huts and shacks for temporary accommodation are as

far away as the admitted dream of a new-comer in the seventies : "I had read that men were kicking up gold with their boots in the streets of Dunedin." That family lived for a time on one meal a day. Now intending immigrants know much better what to expect, and those who are wage-earners enjoy far higher standards of living than those of long ago. They want good homes and all amenities. So it is best to compare today with a period roughly thirty years ago. By 1920 the pioneering period in New Zealand was over, and Gallipoli had produced a sense of nationhood. The immigrant of those days has seen New Zealand recognized as an independent sovereign state within the Commonwealth, with a mind of its own in international affairs. He has witnessed the adoption of a five-day forty-hour week, a wide extension of the state policy of Social Security, a marked development in intellectual life, and a quicker flowering of a national culture. Since 1900 a colony has become a nation.

The most marked immediate difference between 1920 and now lies in the labour market, which, of course, is subject to change. Today

the immigrant falls into the almost trembling arms of the waiting employer. "I was a lost ship in a lost sea," says an Englishman who arrived some thirty years ago, a bleaching-works hand. He got a job on a sheep station twelve miles from the pleasant Wairarapa town of Masterton, "but it might have been twenty thousand feet up on Everest," so great was the isolation. He slept in a bunkhouse and the homestead telephone could not be used. Today twelve miles from Masterton is almost in town. Transport improvement and other amenities, including a national Country Library Service, have made a great difference.

"You didn't give any cheek to the boss in those days, believe me," he continued, "or out you went," and the boss included the foreman. "But mind you, in England you touched your hat to the boss; he didn't know you. Here he's your friend. Immigration today's a picnic to what it was when I came. The immigrant's on the pig's back." This man settled down to a skilled job. "If I'd

stayed in England I wouldn't have been worth much." (He owns two houses and has £1500 in the bank.) "The man who said this was God's own country never said a truer word."

An English carpenter-builder, who returned to England and is back again, tells the same story of concern for jobs thirty years ago. "I never worked so hard in my life as when I came here first. We didn't just walk out of one job into another, as they so often do now. Men don't work as hard as they did." This is a common criticism. "It's the same everywhere," says one who speaks with exceptional authority. I wonder. This is not concerned with what men do in their spare time, a point I shall deal with in a moment. But it is not wise to take an American visitor for a drive about ten in the morning or three in the afternoon, lest he should be shocked by workers sitting drinking their tea by the roadside, though it is amusing to see how Americans are apt to drop into this habit if they stay.

But they also participate keenly in modern activities, for example in medicine: two distinguished Maoris who trained as doctors were Sir Maui Pomare, M.P., and Sir Peter Buck, the anthropologist



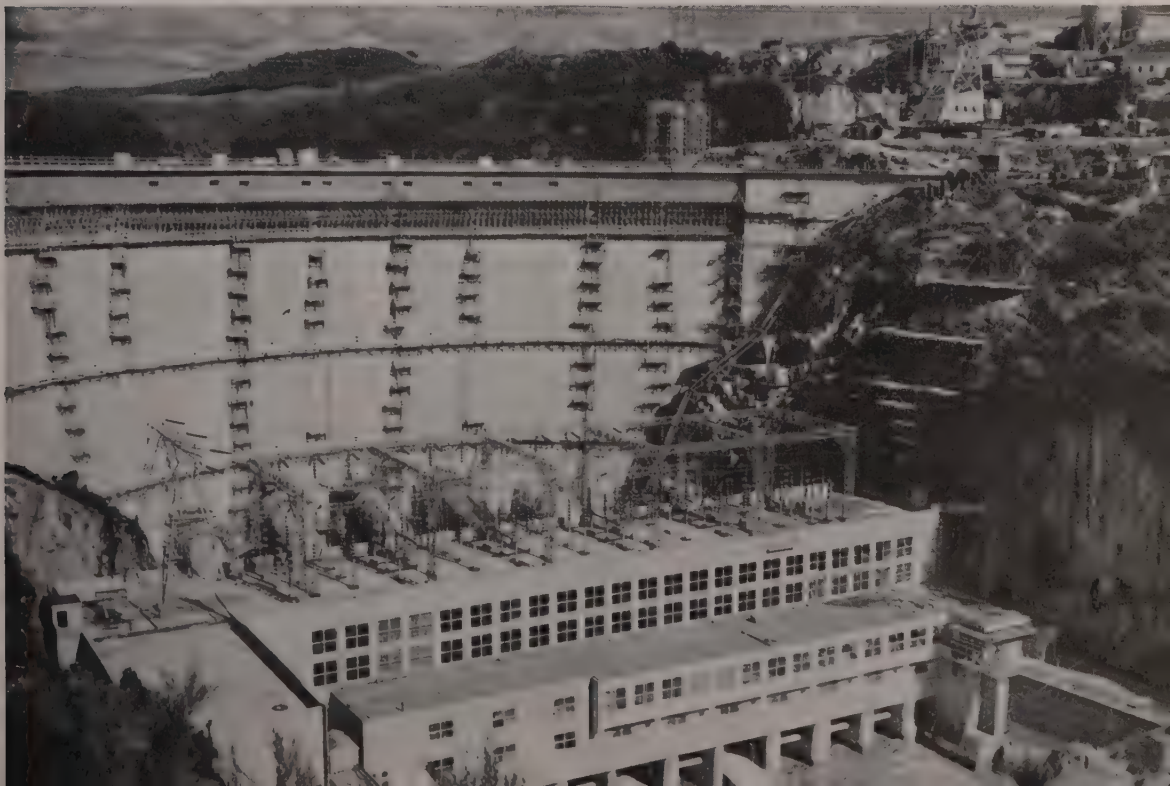


Help for the immigrant in New Zealand has greatly developed in the last thirty years. He is looked after from the moment he arrives: officials meet the ship with details of employment and accommodation. (Above) Wellington railway station and quays, where (below) immigrants receive their mail on arrival





Labour is acutely short in New Zealand, which is "trying to do nearly everything that Britain does, with one twenty-fifth of the population", and there are jobs of every kind waiting for the immigrant. (Above) A London immigrant at the headwork controls of (below) the Maraetai hydra-electric project





"Developments in the last thirty years include patterning the country with tar-sealed highways." This has brought about notable changes in New Zealand, both for those living near the towns and for remotely situated farmers. (Above) An Auckland suburb. (Below) A contrast in transport: a drove of sheep, which may be on the road for ten weeks, being passed by a sheep-carrying truck





A road-construction camp in Central Otago, South Island. The vast programme of public works is spreading up into the most distant parts of New Zealand's rugged mountain country, though some districts are still only accessible on horseback or afoot



Very large sums are being spent on education in New Zealand. Well-designed and well-equipped schools have played an important part in justifying the claim that during the last fifty years a New Zealander has found his way to the forefront in practically every field of human endeavour

Labour is acutely short, by tens of thousands relative to needs. The shortage stretches from labourers to nurses and teachers. New Zealand is trying to do nearly everything that Britain does, with one twenty-fifth of the population. Every kind of employer, including the Government, has been scrambling and begging for labour. Domestic help, once common (I had it myself for nearly thirty years on a moderate professional salary), is rare; bishops and Cabinet Ministers wash up. At railway stations women stagger under loads of luggage. If you eat at hotels you must observe their set hours. ("Oh, the memory of that good steak at ten at night in New York!" murmurs a New Zealand woman.) Many of the restaurants that meet after-hour needs are run by foreigners. If you are ill you go to hospital; there is no chance of getting a nurse. The condition of

many elderly people is pitiable.

In factory and office employers are nervous of finding fault, lest the offender walk out. "I have eaten more dirt in the last few years than ever before," said an employer of labour who was going to a quieter job. Moreover, the trade-unionist's position is stronger than thirty years ago, so there is no risk of labour being exploited. Some of the situations are fantastic. With overtime, lads can make professional wages. Last summer a sixteen-year-old boy took a holiday job in a warehouse at £2 a day. The employer asked the father if the boy would mind cleaning machinery spare parts. "Mind?" said the father, "He'll do what he's told!" "That's good!"

Developments in the last thirty years include patterning the country with tar-sealed highways (our proportion of motor-cars is

one of the highest in the world) and extending water-generated electric light and power to over 90 per cent of homes, including farm-houses, yet the programme of needed public works is vast: more hydro-electric projects, schools and other public buildings of all kinds, and homes. The University Colleges alone are talking in millions. The "picnic" and the "pig's back" are compounded of jobs and assistance. This help for the immigrant has been considerably developed in these thirty years. The twin departments of Immigration and Labour take him by the hand from Britain to bench or farm. Only single persons and family groups for whom housing is privately guaranteed at this end are assisted with passages, but there is advice for all. An official and his wife travel on the special ship. More officials meet the ship, and every immigrant is given full particulars of the waiting employment and of the transport provided to

destination. There is temporary accommodation at very comfortable "hostels"; the old-time term "immigration barracks" would not be acceptable.

Ben Roberts, prominent farmer and Minister of Agriculture in the Labour Government, who died recently, was in the long line of those who rose from nothing on the land. He began life as a plough-boy in Cheshire at 1s. 6d. a week, and worked as a labourer in New Zealand. Now various circumstances make it very difficult to take up a farm. Thousands of New Zealanders, including servicemen, are waiting for one. A friend of mine in Auckland, after a long search, has just settled his only surviving son, a young man of exceptional qualifications, on a farm in Southland, some 800 miles away, which is as if a Londoner went to the extreme north of Scotland, except that Southland is one of our best farming districts. However,

"The University Colleges alone are talking in millions." (Below) *The Medical School at Otago University College, founded in 1877. Men of world-wide reputation in many spheres, such as Lord Rutherford, have been produced by this and the other colleges of the University of New Zealand*



there is plenty of work to be had on the land, and the opportunity to own or lease may turn up sooner or later. A change to be noted in farming is the disappearance of the 'swagger' since my immigrant friend was marooned near Masterton. The swagger tramped the country with a bundle on his back looking for work. If he could not get this at a homestead, he was almost certain of a meal and bed. Now no-one need walk, and jobs are waiting and scheduled.

Housing is a more pressing need, and immigrants will find New Zealanders much concerned about it. On the one hand, rising costs and rent restrictions have killed house-building for speculation or letting other than by the state, which has built thousands of houses, attractive in appearance, well constructed, and in their fittings a joy to the housewife. To my English immigrant who returned a few years ago, these were the most impressive development since he first came to New Zealand. But they are not for the immigrant—at any rate not at first. The English immigrant, so an observer says, and I think with some justice ("English" is used specifically), will not hustle while he waits; he is inclined to expect—and this applies particularly to the middle-class immigrant—a home to be found for him. He does not buy an old house and do it up or get a 'section' and start work on it. The New Zealander frequently bustles about in these ways. He excavates, breaks in a section, perhaps starts with an army hut, perhaps even builds the house, or helps the carpenter.

Here a national development is noted. Always handier than the Englishman, because he has had to do so much more for himself, the New Zealander is now being pressed to further domestic efforts by high costs and labour shortage. When the forty-hour week is over, tens of thousands of men work hard at home on Saturday and Sunday—gardening, painting, concreting, building. All classes are in it. "When I was young", says one high up in the educational world, "we got a man in to do a job like painting. Now I'm painting my house. It's the difference between £100 for a painter and £15 for materials to do it myself." "I think I may call myself a middle-class representative New Zealander on a good salary," says an economist of note. "I am excavating a section for a house and building concrete walls." I have heard of a clergyman who recently, on the eve of his retirement, saved the parish £200

by painting his vicarage. It is put forward that one main aesthetic outlet of New Zealanders is building or developing their own homes. Immigrants have a bias to tenancy. The New Zealander prefers ownership. One thing is certain: gardening is the most popular form of artistic expression.

This is one of many social conditions to which the immigrant should try to adjust himself. I have said "Englishman". The Scot is more adaptable, more democratic, less expectant of "the deference due to me"; and, generally speaking, in peace and war the New Zealander gets on with him better. Social life in New Zealand is closer to the English than in any other Dominion, and it has been suggested that the disappointment of immigrants arises partly from the shock this resemblance gives them. However, there are many differences, ranging from the wooden, detached, often draughty and less cosy houses, to the absence of the gossip-encouraging bar in the pub. Newcomers miss the 'local'. Drinking in public bars is done standing and often against time. "I have sat in the open of an evening", says a New Zealander of a tropical assignment, "and drunk my beer listening to good music. Now I come back to this disgusting swilling." Perhaps immigration, British and foreign, will help to bring about reform.

The golden rule for immigrants is to keep their eyes and ears open and their mouths shut—for a good while. This is all the more necessary today because in the last thirty years New Zealanders have become much less inclined to take their opinions and tastes from the Homeland. The devotion is just as great, but the awe is less. "You people he-ah." That's what annoys New Zealanders," an old newspaper hand said to me fifty years ago. It annoys us more today, especially when it is "You people OUT he-ah," as if we were beyond the bounds of civilization. The worst mistake an immigrant can make is to say: "We don't do it this way in England." My immigrant of the "pig's back" has noticed this. "These new blokes talk about 'what we do at home'. I said 'Just drop that!' to a couple of them the other day." The New Zealander is less and less inclined to accept patronage. So if the immigrant is wise, and still more so the official in or from London, he will treat New Zealanders not as interesting children who deserve a pat on the head, but as equals.